

WAVE INFORMATION STUDIES
OF US COASTLINES

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WIS REPORT 23

HINDCAST WAVE INFORMATION
FOR THE GREAT LAKES: LAKE SUPERIOR

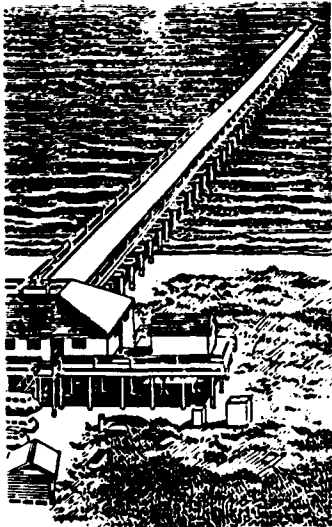
by

David B. Driver, Robin D. Reinhard, Jon M. Hubertz

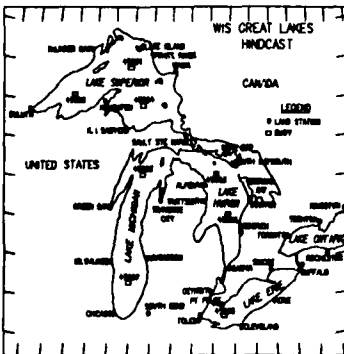
Coastal Engineering Research Center

DEPARTMENT OF THE ARMY

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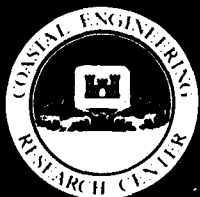


January 1992

Final Report

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92-06920



Prepared for DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, DC 20314-1000

92-06920

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OMB No. 0704-0188

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1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE January 1992	3. REPORT TYPE AND DATES COVERED Final report	
4. TITLE AND SUBTITLE Hindcast Wave Information for the Great Lakes: Lake Superior			5. FUNDING NUMBERS	
6. AUTHOR(S) David B. Driver, Robin D. Reinhard, Jon M. Hubertz				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USAE Waterways Experiment Station Coastal Engineering Research Center 3909 Halls Ferry Road, Vicksburg, MS 39180-6199			8. PERFORMING ORGANIZATION REPORT NUMBER WIS Report 23	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) US Army Corps of Engineers Washington, DC 20314-1000			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES See reverse.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Thirty-two years of hindcast wind and wave information is summarized for 95 locations along the shoreline of Lake Superior in four data products: percent occurrence tables, wave rose diagrams, mean and largest wave heights and 32-year statistics tables, and return period tables. The procedures used to produce this information are discussed, and examples of verification against measurements are shown.				
14. SUBJECT TERMS Great Lakes Wave hindcast Oceanography Wind waves Statistics			15. NUMBER OF PAGES I - 671; II - 599	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED			16. PRICE CODE	
18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT		20. LIMITATION OF ABSTRACT

11. (Continued).

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PREFACE

The Wave Information Study (WIS) was authorized in December 1976 by Headquarters, US Army Corps of Engineers (HQUSACE). The study is part of the Coastal Field Data Collection Program, which is managed by the Coastal Engineering Research Center (CERC), US Army Engineer Waterways Experiment Station (WES). The HQUSACE Technical Monitors for the Field Data Collection Program are Messrs. John H. Lockhart, Jr.; James E. Crews; Robert H. Campbell; and John G. Housley. Mr. J. Michael Hemsley was the former Program Manager, Ms. Carolyn M. Holmes is the present Program Manager, and Dr. Jon M. Hubertz is the WIS Project Leader.

This report is one of five that present the results of wave hindcasts for the Great Lakes. The Great Lakes hindcasts were performed by Dr. Hubertz, Mr. David B. Driver, and Ms. Robin D. Reinhard, assisted by Mr. Alan Cialone, Ms. Robin Hoban, and Mr. Donald E. Eicher, all of the Coastal Oceanography Branch (COB), Research Division (RD), at CERC.

The study was conducted under the direct supervision of Dr. Edward F. Thompson, former Chief, COB; Dr. Hubertz, Acting Chief, COB; Dr. Martin C. Miller, Chief, COB; and Mr. H. Lee Butler, Chief, RD, CERC, and under the general supervision of Mr. Charles C. Calhoun, Jr., Assistant Chief, CERC, and Dr. James R. Houston, Chief, CERC. The word processing was by Ms. M. Jane Stauble, COB, and Ms. J. Holley Messing, RD.

COL Larry B. Fulton, EN, is the Commander and Director of WES.
Dr. Robert W. Whalin is Technical Director.

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CONTENTS

	<u>Page</u>
PREFACE	1
CONVERSION FACTORS, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT	3
PART I: INTRODUCTION	4
Previous Studies	5
Procedure	6
PART II: DETERMINATION OF WIND FIELDS	8
Source	8
Corrections	9
PART III: WAVE MODEL	11
Theoretical Considerations	12
Wave Propagation	13
Numerical Simulation of Wave Growth and Dissipation	14
Wind Input	14
Description of Wave Growth and the Behavior of the Wave-Wave Interaction Source Term	15
PART IV: MODEL CALIBRATION	21
PART V: VERIFICATION	23
PART VI: ESTIMATION OF ICE CONCENTRATION	24
PART VII: EXPLANATION OF SUMMARY TABLES	26
Percent Occurrence Tables	26
Wave Rose Diagrams	27
Mean H , Largest H , and 32-Year Statistics Tables	28
Return Period Tables	29
PART VIII: RESULTS	31
REFERENCES.	33
TABLES 1-15	
FIGURES 1-18	
APPENDIX A: SUMMARY TABLES.	A1
APPENDIX B: RETURN PERIOD TABLES.	B1
APPENDIX C*: PERCENT OCCURRENCE TABLES, ICE CONDITIONS	C1
APPENDIX D: MEAN AND MAXIMUM MONTHLY VALUES, ICE CONDITIONS	D1
APPENDIX E: RETURN PERIOD TABLES, ICE CONDITIONS.	E1

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CONVERSION FACTORS, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT

Non-SI units of measurement used in this report can be converted to SI (metric) units as follows:

<u>Multiply</u>	<u>By</u>	<u>To Obtain</u>
degrees (angle)	0.01745329	radians
knots (international)	0.5144444	meters
miles (US statute)	1.609347	kilometers

HINDCAST WAVE INFORMATION FOR THE GREAT LAKES:
LAKE SUPERIOR

PART I: INTRODUCTION

1. The primary purpose of this study is to provide an accurate and comprehensive database of information descriptive of the long-term wave climate for the Great Lakes. The goal is to accurately represent mean values of wave parameters such as height, period, and direction. At any station, the hindcast values are expected to differ at times from measured values, but this difference will generally be small and, in the mean, approach zero. It is also expected that the extreme values at any station will accurately represent actual conditions and provide reliable design wave information. This report describes the selection of a grid and hindcast sites, methods used to process and prepare input wind fields, numerical model calibration and verification, and production of a 32-year (1956-1987) hindcast. Information of this nature is essential to the efforts currently being undertaken by both US and Canadian interests in developing workable shoreline management guidelines and navigational aids. Projects benefiting from such information include dredging and dredge disposal, beach nourishment and erosion studies, and the design of coastal structures such as jetties, harbors, revetments, and breakwaters, as well as local projects for improving recreation safety.

2. Prior to 1979, measurements of wave data on the Great Lakes were scarce and quite short in duration. The available data were generally associated with site-specific studies and were usually located nearshore in shallow water. Very few data are available from wave gages, and many of these are in an unanalyzed, analog form. Visual wave observations are available from US Coast Guard stations at several shore locations and from commercial ships for waves offshore.

3. In 1979 the National Data Buoy Center of the National Oceanic and Atmospheric Administration (NOAA) extended their wave measurement program to the Great Lakes, using large, boat-shaped buoys equipped with anemometers, air-water temperature sensors, and vertical accelerometers for wave height measurements. The purpose of this program was to provide a comprehensive set

of climatological data for a long period of record from fixed locations in the near coastal and deep ocean areas adjacent to the US mainland. The first two buoys were installed in northern Lake Michigan and central Lake Superior, respectively. During 1980 and 1981, six additional buoys were deployed: two more in Lake Superior, one in southern Lake Michigan, two in Lake Huron, and one in western Lake Erie. Lake Ontario remains without a buoy.

4. These buoys provide the best long-term wave measurements available for the Great Lakes. Unfortunately, the buoys are removed during the heavy icing season of November to March and are, therefore, subject to miss the winter storms that produce the largest and most destructive waves. Figure 1 shows the location of each of these buoys. Wind and wave information from these buoys were used for calibration and verification of both input wind fields and the numerical wave model.

Previous Studies

5. Prior to this effort, numerical hindcasts of the Great Lakes were conducted by Resio and Vincent (1976a, b, and c; 1977a and b; 1978), hereafter referred to as RV, for the US Army Corps of Engineers (COE) and by a number of Canadian firms for the Ontario Ministry of Natural Resources (1988a, b, and c). The RV study established the hindcast procedure for the Great Lakes that the present study employs, including guidance for the use of measured overland winds to estimate overlake winds. This hindcast was also the first attempt within the COE to use a numerical scheme for wave calculations instead of the standard empirical/analytical approach, such as the Sverdrup-Munk-Bretschneider method (Shore Protection Manual (SPM) 1984). The major differences between RV and the present study are (a) the length of the hindcast period and events hindcast; RV used up to a 69-year record (1907-1975) but only hindcast "storm events," whereas the present study uses a complete 32-year wind record (1956-1987); (b) the present study uses more recent wind information, which, because of improved technology, is of better quality than some of the early data; (c) the present study considers the effects of ice cover, whereas the RV study did not, although RV did provide guidance to include ice effects in a probabilistic sense; (d) the present study reflects advances in understanding of the physics involved in wave generation, propagation, and dissipation and

employs current techniques to model these processes. RV classified "storm events" as days with average wind velocities over the lake of 25 knots* or above, as recorded on the ships' anemometers. Results from RV were tabulated as return period statistics for use in design criteria at hindcast sites along the US coastline. The time series of wind and wave information was not archived.

6. The Canadian hindcasts were developed as part of a Shoreline Management Plan designed to fill the need for a wave climate database for the Great Lakes in Ontario. The approach was similar to that used in the present study. The overlake winds were estimated from several land-based meteorological stations (as per RV), and the presence of ice cover was included. The criterion employed to determine the extent of ice cover is similar to that used for the present study. The Canadian hindcasts produced a wave climate database for stations along the Canadian shoreline that were continuous in time. The time interval of each hindcast varies from 1971-1985 for Lake Erie, 1964-1983 for Lake Ontario, 1962-1970 for Lake Superior, and 1953-1987 for Lake Huron. Lake Michigan was not hindcast. The grid size and number of archived stations are specific for each lake and were selected to provide an accurate representation over the lake with the minimum number of sites. Because of damage during previous storms, shoreline erosion, and existing and proposed developments, these stations were considered priority sites by the Ministry of Natural Resource and Conservation Authority.

Procedure

7. The selection of a grid was based on the grids used previously in the RV study to allow comparison with the present study. A 10-statute-mile square grid covering the entire lake was generated. Most of the nearshore and a few midlake grid points were designated as stations at which all model data would be saved (i.e. save stations) (Figure 2). Based on this grid, a land-water boundary matrix was established (0 = land, 1 = water) for computational purposes. Deep water was assumed across the grid; therefore no bathymetric

* A table of factors for converting non-SI units of measurement to SI (metric) units is presented on page 3.

data were used. The measured winds from land stations surrounding each lake were converted to an elevation of 10 m after being adjusted for the effects of air-water temperature differences and the land-water interface. These adjustments are discussed in more detail in the following section. The winds were interpolated over the grid at 3-hr intervals.

8. Measured wave data were obtained from NOAA buoys. Prior to the development of the full 32-year data set, the model was run for selected periods of time (corresponding to available NOAA data), and the results were compared with measured data. Wind speeds were then modified, as necessary, as part of the model calibration process. Verification runs were then made for the entire set of available buoy data. Procedures for and results of model calibration and verification are discussed in more detail in subsequent sections.

9. Two data files were created and saved. One, referred to as the parameter file, contains a single record every 3 hr for 32 years for each station. This record includes station identification and location, wave height, peak spectral period, and average wave direction. The second file contains similar information in addition to the full two-dimensional (frequency and direction) distribution of spectral wave energy. The results of various parameter file analysis, including calculation of percent occurrence tables, mean and maximum monthly values, and return period statistics, are presented for the designated save stations. The location of each station is given in Table 1.

PART II: DETERMINATION OF WIND FIELDS

10. The results of any numerical wave hindcast study depend heavily on the quality of the winds used to drive the model and are, therefore, only as good as the input data. In addition to the quality of the wind data, the length of the historical wind record is an important parameter. The longer the period of time that a particular parameter has been observed, the better are any estimates of statistical properties of that population. The only three sources of data with sufficient length of record for the present hindcast are (a) pressure observations at land stations, (b) synoptic weather maps derived from pressure observations, and (c) wind observations at land stations and on ships.

Source

11. The calculation of winds from pressure observations or fields requires the use of a planetary boundary layer model and some simplifying assumptions. Therefore, it was felt that a more straightforward approach should be used. Ship observations were not included because of the inconsistent nature of these measurements in space and time. The incorporation of this information was seen as too time consuming for the present long-term study. Ship wind speeds were used by RV since they addressed only "storm events," which by nature are short in duration. The wind directions recorded by ships were not used in RV since they were often inconsistent.

12. With these factors in mind, estimation of the wind fields over each of the Great Lakes was accomplished by using the most reliable, long-term, continuous wind observations that were available from both US and Canadian coastal land stations. This approach is limited by the distribution of measurement sites around the lakes, but it is considered to be the best alternative. On the US side, these data generally came from National Weather Service stations located at larger airports near the lakes. The Canadian data, supplied by the Canadian Climate Centre (CCC), came from airports and various other CCC weather stations around the lakes. Figure 3 shows the location of the stations used, and Table 2 provides the period of record available for each station. Buoy-measured winds possessed a large number of

variable-sized gaps and a wide variation in terms of period of record for any given year. For this reason, they were not included in the following procedure.

13. The wind data, commonly measured and recorded at hourly intervals, were sampled every 3 hr beginning at 00:00 Greenwich Mean Time (GMT) on 1 January 1956. A 3-hr interval was chosen because of the lack of continuous hourly data. Gaps of short duration were interpolated to provide a continuous time series. All data were then corrected to an elevation of 20 m using the standard 1/7th power law for the wind speed profile (Davenport 1960). This approximation, given by

$$U_{20} = U_z \left(\frac{20}{z} \right)^{\frac{1}{7}} \quad (1)$$

estimates the wind speed U_{20} at 20 m from the observed wind speed U_z at elevation z .

Corrections

14. Corrections for the air-water temperature difference and for the difference in frictional effects between land and water were then applied. These corrections were based on two empirical curves developed by RV (1976c), one relating the overland-overlake wind speed ratio to the air-water temperature difference and one relating overlake wind speed (U_w) to overland wind speed (U_l). The approximation of these curves is given by the following formula derived by Schwab and Morton (1984):

$$U_w = U_l \left(1.2 + \frac{1.85}{U_l} \right) \left[1.0 - \frac{\Delta T}{|\Delta T|} \left(\frac{|\Delta T|}{1920} \right)^{\frac{1}{3}} \right] \quad (2)$$

where U_l is given in meters per second at an elevation of 20 m and the air-water temperature difference ΔT is measured in degrees Celsius. Air-water temperature differences derived from ship observations and classified as a function of month and 10-deg direction intervals (Table 3) were obtained from RV (1976c).

15. Overlake winds were then estimated from the measured overland winds using a weighted inverse distance interpolation routine with an r^{-3} spatial

weighting function, where r is the distance from the land station to the overwater grid point of interest. The final correction was an additional application of the 1/7th power law to correct the winds to an elevation of 10 m for input into the wave model.

PART III: WAVE MODEL

16. The wave model used in this study, DWAVE, was developed by Dr. Donald T. Resio of Offshore and Coastal Technologies, Inc. It is described in Resio and Perrie (1989) and in an unpublished contractor's report* available from the Wave Information Study (WIS) Project Office.

17. DWAVE is a FORTRAN computer code that simulates wave growth, dissipation, and propagation in deep water. The modeled spectra are represented as fully two dimensional in discretized frequency and direction bands. Propagation effects and source-sink mechanisms are computed in terms of variations of energy levels in each of these frequency-direction elements. All wave parameters, such as wave height, frequency of the spectral peak, and mean wave direction, are computed from these discrete elements. Figure 4 shows how energy is partitioned in a directional spectrum within DWAVE. As seen there, each frequency-direction increment is envisioned as a "bin," and these "bins" are centered on specified frequencies and directions.

18. The physics embodied in DWAVE represents the state of the art in present understanding of wave generation. It is the first discrete-spectral model to be based on an f^{-4} equilibrium range formulation, as supported by almost all past field experiments (Toba 1978, Forristall 1981, Kahma 1981, Kitaigorodskii 1983). As such, it represents the only model (including the third-generation models under development in Europe) that is consistent with energy conservation in the equilibrium range, as calculable from the complete or reduced Boltzmann integrals. The fetch-growth characteristics of DWAVE are similar to the Joint North Sea Wave Project (JONSWAP) relationships, i.e., wave energy increases linearly with fetch; and the duration-growth characteristics are roughly similar to those of Resio (1981) and the US Navy's Spectral Ocean Wave Model (SOWM).

19. DWAVE will run on computers ranging from desktop microcomputers to supercomputers. Many years of model development have led to an understanding

* D. T. Resio and D. P. Bach, 1989, "Program DWAVE: Global/Regional, Deep-Water Wave Model User's Manual," Offshore and Coastal Technologies, Inc., Vicksburg, MS.

of the "trade-offs" between avoiding unnecessary tedious calculations and maintaining numerical accuracy.

Theoretical Considerations

20. The model is based on the assumption that the wave field on a water body can be represented by a distribution of energy in discrete frequency and direction elements as schematized in Figure 4. The change in energy in each element as a function of time at all specified points on the water body is determined by the radiative transfer equation

$$\frac{\partial E_2(f, \theta)}{\partial t} = \bar{c}_g(f, \theta) \cdot \nabla \vec{E}_2(f, \theta) + \sum_{k=1}^n S_k(f, \theta) \quad (3)$$

where E_2 is the two-dimensional spectral energy at frequency f and direction θ . The group velocity is c_g , and S_k represents a number of functions that act as sources or sinks for energy. This equation is solved at each point in a square grid on the water body for successive intervals in time. The wind source term supplies energy to the sea surface and allows the wave spectrum to grow and the wave-wave interaction term controls development of the spectrum.

21. Hasselmann (1962) derived an equation for four resonantly interacting waves, which he showed to be the lowest order interaction capable of achieving a net transfer of energy among spectral components in a statistically homogeneous wave field. Although Hasselmann et al. (1973, 1976) argued that these wave-wave interactions controlled the shape of a spectrum, they did not pursue the spectral balance responsible for this tendency. Tracy and Resio (1982) showed that a number of exact geometric similarities were exhibited within the collision integrals for wave-wave interactions; however, they made use of these similarities only to improve the efficiency of numerical integration for the full integral. Only recently Kitaigorodskii (1983) demonstrated that inherent in the collision integrals for wave-wave interactions are geometric constraints on the gradient of energy density in the equilibrium range of a spectrum. Kitaigorodskii pointed out the analogue between this "equilibrium" range behavior and the Komolgoroff range in turbulence. Kitaigorodskii's derivation is based solely on dimensional

arguments and does not illustrate some of the important geometric scaling aspects inherent in the collision integral. A different derivation, one which follows the scaling aspects of this integral, is offered by Resio (1981).

22. This derivation implies that an equilibrium range in action density in a deepwater wave spectrum is representable as

$$n(k) = B'k^{-4} \quad (4)$$

where B' is a constant with units time^{-1} and k is the wave number. Equation 4 is equivalent to that derived by Kitaigorodskii (1983), although the two methods of derivation differ significantly. Figure 5, from numerical calculations using the full collision integral, shows that, in deep water, an equilibrium range with this form does come very close to a constant energy flux equilibrium form. Flux divergence, which would produce steeper equilibrium range slopes, will occur for values of the power of k less than 4; and flux convergence, which would produce shallower equilibrium range slopes, will occur for values of the power of k greater than 4. Thus, there is a strong shape restoring-preserving tendency inherent in these energy fluxes due to wave-wave interactions.

Wave Propagation

23. In DWAVE, each frequency-direction element in the directional wave spectrum is propagated independently, according to an upstream differencing method. This technique is presently employed in the latest third-generation models in Europe. Its advantages in terms of stability, execution time, and set-up simplicity outweigh any gains by using higher order propagation schemes. During the development phase of DWAVE, several higher order propagation schemes were tested in actual wave simulations. Typical differences in spectral energy contents and total energies, under these "real-world" conditions, were typically only a few percent or less.

24. A latitude-longitude grid is used in DWAVE. Propagation along meridians (or components of propagation along meridians) is the equivalent of propagation along great circles. Consequently, there is no curvature away

from a straight-line propagation along these axes; however, divergence/convergence effects must be incorporated for meridional propagation. For propagation along latitudes (parallels), there is no divergence/convergence; however, there is an angular curvature that must be considered.

Numerical Simulation of Wave Growth and Dissipation

25. The proper simulation of the physics of energy transfer into and out of each element in the directional spectrum is essential to accurate wave modeling. In DWAVE, the simulated sources and sinks are as follows:

- a. Energy transfer from the atmosphere to the wave field.
- b. Energy transfer among wave frequencies (wave-wave interactions).
- c. Energy transfer from waves to the atmosphere (swell propagating against the wind).
- d. Energy losses due to wave breaking in deep water.

Wind Input

26. The energy input into the spectrum is given by

$$\frac{\partial E_2(f, \theta)}{\partial t} = B(f, \theta) E_2(f, \theta) \quad (5)$$

where $B(f, \theta)$ is a function with units of time^{-1} given by

$$B(f, \theta) = z \left(\frac{uf_m}{g} \right) f \cos(\theta_{wv} - \theta_{wd}) \quad (6)$$

where

- f = frequency
- z = dimensionless constant
- u = wind speed
- f_m = peak frequency
- g = acceleration of gravity
- θ_{wv} = wave direction
- θ_{wd} = wind direction

The constant z is composed of the drag coefficient, the ratio of air density to water density, and an empirical constant and should have a value between 0.16 and 0.24. The value used in this study is 0.2.

Description of Wave Growth and the Behavior
of the Wave-Wave Interaction Source Term

27. From Hasselmann et al. (1973), Mitsuyasu (1968), and others, the following is obtained

$$\hat{E}_0 = J\hat{x} \quad (7)$$

and

$$\hat{E}_0 = E_0 \frac{g^2}{u_*^4} \quad (8)$$

where J is a dimensionless empirical constant. Nondimensional values of energy \hat{E}_0 and fetch \hat{x} are given by

$$\hat{x} = \frac{gx}{u_*^2} \quad (9)$$

where

E_0 = total wave energy

u_* = friction velocity

x = fetch

The constant J ranges in value from 1.0×10^{-4} to 1.5×10^{-4} . The value used in this study is 1.28×10^{-4} . Substituting the definitions of \hat{E}_0 and \hat{x} into Equation 7 and taking a derivative with respect to distance for the equation, the following is obtained:

$$\frac{\partial E_0}{\partial x} = J \frac{u_*^2}{g} \quad (10)$$

Thus, Equation 10 indicates that the rate of gain of energy with fetch is independent of fetch. Converting to a time rate of growth,

$$\frac{\partial E_0}{\partial t} = \langle c_g \rangle J \frac{u_*^2}{g} \quad (11)$$

where $\langle c_g \rangle$ is an average group velocity such that

$$\langle c_g \rangle = \frac{1}{E_0} \int_0^\infty \int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \vec{E}_2(f, \theta) \cdot \vec{c}_g d\theta df \quad (12)$$

If a parameter, β_1 , is defined such that

$$\beta_1 c_{gm} = \langle c_g \rangle \quad (13)$$

where c_{gm} is the group velocity of waves at the spectral peak (i.e., $c_g(f_m)$ where f_m is the frequency of the spectral peak), Equation 11 becomes

$$\frac{\partial E_0}{\partial t} = \beta_1 c_{gm} J \frac{u_*^2}{g} \quad (14)$$

In discrete spectral models, the radiative transfer equation,

$$\frac{\partial E_2(f, \theta)}{\partial t} = \vec{c}_g(f, \theta) \cdot \nabla \vec{E}_2(f, \theta) + \sum_{k=1}^n S_k(f, \theta) \quad (15)$$

where $S_k(f, \theta)$ represents energy input or loss at a spectral element with frequency f and direction θ due to the k^{th} source term, is solved at every time step for each water point in the computational grid. In order to estimate important spectral balances and energy exchanges due to nonlinear wave-wave interactions, it is essential to know the location of the spectral peak. In the previous WIS model, as described by Resio (1981), the nonlinear wave-wave interaction source term is treated explicitly. A problem with this approach is that the location of f_m actually evolves during each time step and an explicit treatment which holds it constant over a time step can lead to significant underprediction of wave period.

28. To obtain an implicit representation for nonlinear source terms, begin by expressing the total energy in a spectrum in terms of a set of spectral parameters in a manner consistent with Equation 2.6 of Resio and Perrie (1989),

$$E_0 = \frac{1}{3} \lambda \alpha g (u_*^2 c_m)^{1/3} f_m^{-3} \quad (16)$$

where λ is a constant of proportionality ranging in value from 1.5 to 2.0 and c_m is the phase velocity of the spectral peak. The value used in this study is 1.75. The constant α ranges in value from 0.035 to 0.05. The value used in this study is 0.045. This relationship is appropriate for self-similar spectra with an f^{-4} equilibrium range. As discussed by Resio and Perrie (1989), spectra of this type can be written in a fashion analogous to the form of the JONSWAP spectrum, i.e.

$$E(f) = \alpha \frac{(u_*^2 c_m)^{1/3} g}{(2\pi)^3} f^{-4} \Psi\left(\frac{f}{f_m}\right) \quad (17)$$

where

$$\Psi\left(\frac{f}{f_m}\right) = \gamma \exp\left[-\frac{(f-f_m)^2}{2(\sigma f_m)^2}\right] \quad \text{for } f \geq f_m \quad (18)$$

or

$$\Psi\left(\frac{f}{f_m}\right) = E(f_m) \exp\left[1 - \left(\frac{f}{f_m}\right)^4\right] \quad \text{for } f < f_m \quad (19)$$

and γ and σ are the JONSWAP coefficients. From the form of Equations 17, 18, and 19, it is apparent that the parameter λ is dependent on γ and σ in a fairly nonlinear fashion; however, the actual variability for reasonable values of γ and σ constrain λ to be somewhere between 1.5 and 2.0, so the net effect of variations in γ and σ is not too large. In DWAVE the value of λ is set at a constant 1.76.

29. Returning to Equation 16 and making use of the deepwater definitions of phase and group velocities, i.e.

$$c = \frac{g}{2\pi f} \quad ; \quad c_g = \frac{g}{4\pi f} \quad (20)$$

gives

$$E_0 = Q_1 f_m^{-10/3} \quad (21)$$

where

$$Q_1 = \frac{\lambda \alpha_*}{3 (2\pi)^{10/3}} u_*^{2/3} g^{4/3} \quad (22)$$

and α_* is α divided by the square root of the drag coefficient, and from Equation 14,

$$\frac{\partial E_0}{\partial t} = \mathcal{J}\beta_1 \frac{g}{4\pi} \frac{u_*^2}{g} f_m^{-1} \quad (23)$$

If $R = f_m^{-10/3}$, then Equation 23 becomes

$$\frac{\partial Q_1 R}{\partial t} = \mathcal{J}\beta_1 \frac{g}{4\pi} \frac{u_*^2}{g} R^{3/10} \quad (24)$$

Separating the variables and integrating yields

$$\frac{10}{7} (R^{7/10} - R_0^{7/10}) = \frac{\mathcal{J}\beta_1}{Q_1 4\pi} u_*^2 (t - t_0) \quad (25)$$

where the subscript "0" refers to initial conditions at time t_0 . Rearranging and substituting f_m back into Equation 21 yields

$$f_m^{-7/3} = f_m^{-7/3}|_{t_0} + \frac{7}{10} \frac{\mathcal{J}\beta_1 u_*^2}{Q_1 4\pi} (t - t_0) \quad (26)$$

If all dimensional quantities are factored out, then the change in f_m over a time step is given as

$$f_m^{-7/3}|^{n+1} = f_m^{-7/3}|^n + \frac{\mathcal{J}\beta_1}{\lambda \alpha_*} Q_3 \left(\frac{u_*}{g} \right)^{4/3} (t - t_0) \quad (27)$$

where the superscripts "n" and "n+1" refer to time-step counters and

$$Q_3 = \left(\frac{7}{10} \right) \frac{3 (2\pi)^{10/3}}{4\pi} \quad (28)$$

Thus, the rate of change of f_m can be seen to depend on four parameters, J , λ , α_* , and β_1 . Each of these parameters can be defined independently, J and α on an empirical basis and λ and β_1 from numerical constraints.

30. Equation 23 expresses a fundamental law for active wave generation. This can be converted into a nonlinear source term by equating S_{NL} to differences in energy densities

$$S_{NL}(f, \theta) = [\hat{E}(f) |^{n+1} - \hat{E}(f) |^n] \Phi(\theta - \theta_0) \quad (29)$$

where $\hat{E}(f)$ is the estimated value of the one-dimensional spectral density $E(f)$, $\Phi(\theta - \theta_0)$ is an angular function, and θ_0 is the mean wave propagation direction. The approach to a fully developed sea can be modeled by introducing a limiting parameter such that

$$T_m |^{n+1} = T_m |^n + p \frac{\partial T_m}{\partial t} \Delta t \quad (30)$$

where T_m is the peak period and p is given by

$$p = 1 \text{ if } f_m > f_{PM}$$

$$= 0 \text{ if } f_m \leq f_{PM}$$

and f_{PM} is the "fully" developed peak frequency given by

$$f_{PM} = Z_c g / (2\pi u)$$

where Z_c is a dimensionless empirical constant (taken as 0.9 in DWAVE).

31. Swell decay in this model is based on the concept of energy loss by nonlinear fluxes. In this form, the total energy flux from the "rear-slope" portion of the spectrum is estimated as

$$\Gamma_E = \left[\frac{a_1 (2\pi)^9}{g^4} \right] E_0^3 f_m^5 \quad (31)$$

where a_1 is a dimensionless empirical constant that ranges in value from 0.35 to 2.0. The value used in this study is 0.40. An explicit scheme is used to estimate the energy loss over the time step, and a part of the energy is redistributed to the forward face. A schematic of S_{NL} is shown in Figure 6 from Resio and Bach.*

32. In summary, DWAVE is a computer code that simulates the growth, propagation, and decay of wave energy as a function of space, time, frequency, and direction. Wave growth occurs through transfer of energy from the wind to the sea surface. Part of this energy results in surface gravity waves. As energy continues to flow into the spectrum, wave-wave interactions transfer energy from the midrange portion of the spectrum to both the forward face and high-frequency regions. For constant wind input, eventually an equilibrium of energy versus frequency is reached. Wave energy is propagated in space through time as a function of frequency and direction of each of the discrete energy packets.

* Resio and Bach, op. cit.

PART IV: MODEL CALIBRATION

33. Most numerical wave models require a certain amount of fine-tuning, or calibration, when first applied to a particular area. A model can be calibrated in several ways, including adjustment of certain internal parameters that control processes such as wave growth, propagation, and dissipation; adjustment of external parameters, such as input wind fields; or a combination of both. To determine if, and to what degree, the model used in the present study required calibration, modeled winds and waves taken from the grid point closest to each buoy location were compared with the same buoy-measured parameters for the period 1981 to 1986. Stated accuracy for the measured parameters is ± 0.2 m, or 5 percent, for wave height; ± 1.0 sec for spectral peak period; ± 1.0 m/sec, or 10 percent, for wind speed; and ± 10 deg for wind direction (Gilhousen et al. 1990). Percent distribution histograms of measured (Buoys 45001, 45004, and 45006) versus modeled (WIS Sta 94, 95, and 92) wind speed, wave height, and peak spectral wave period were examined. Figure 7a shows that the distribution of wind speed at Buoy 45001 (WIS Sta 94) is significantly different, with the buoy exhibiting a smaller (50 versus 64) percentage of wind speeds 5 m/sec and less, and a higher (50 versus 36) percentage of speeds greater than 5 m/sec. The resulting wave height distribution plot (Figure 7b) reflects the differences exhibited by the winds, particularly at the extremes. A difference in the distribution of peak periods is evident (Figure 7c). Similar trends are evident in the distribution plots for Buoys 45004 and 45006 and their corresponding WIS stations, 95 and 92 (Figures 8a, b, and c and Figures 9a, b, and c).

34. Given the inherent problems in assimilating wind data from irregularly spaced (both spatial and temporal) observations and in determining how best to blend all the available data, it was felt that the input wind field was the most "free" parameter to vary for model calibration. The best approach was determined to be an adjustment to the input (modeled) wind speeds that would force a closer match to the measured wind speed distribution. This adjustment was accomplished by plotting the cumulative distribution curve for both the measured and modeled wind speeds, selecting, from each curve, wind speed values at fixed percentage values (10, 20, 30, ...etc.), and determining the best fit relationship between the selected values. This procedure was

done for all three buoys and resulted in an adjustment to the original modeled winds based on the linear relationship:

$$Y = 1.1129 X + 0.58 \quad (32)$$

relating measured (Y) and modeled (X) wind speeds. Subsequent to this adjustment, wind speeds of 10 m/sec and greater were further increased by 2 m/sec to provide better correlation with the larger waves produced during storm events. The effect was to re-distribute the modeled wind speeds, resulting in the distribution shown in Figures 10a, 11a, and 12a. Wind directions were unchanged. This improved agreement in wind speeds resulted in the corresponding improvement in the wave height and peak period distributions shown in Figures 10b and c, 11b and c, and 12b and c. Based on this improved agreement, the above procedure was considered sufficient and was used for the entire 32-year hindcast.

PART V: VERIFICATION

35. An important question to ask in any study involving numerical models, whether used for hindcasting purposes as in the present study or as a forecasting tool, is, "How well does the simulated data reproduce, or predict, what has, or what will, occur?" The ability to answer this question with any degree of confidence depends on the availability and quality of field measurements within the study area. As was pointed out in the introduction, wave height measurements on Lake Superior prior to the installation of the NOAA buoys were scarce.

36. The main source of verification data are the NOAA buoys which, for purposes of this study, have provided data for varying portions of 6 years (1981-1986). In an effort to verify both the model and the corrections made to the input wind speeds, all available data from each of the three buoys was compared with corresponding modeled data via time-history plots and various statistical measures. Figures 13, 14, and 15 show representative samples of time-history comparison plots for each buoy location. In general the agreement is quite good, with all high wave events (greater than 2 m) correctly modeled in both time and amplitude. Tables 4 through 9 contain the wave height and peak period statistics for the 6-year period for each buoy location. The mean and maximum values are in close agreement, with correlation coefficients ranging from 0.73 to 0.85 for wave heights and 0.63 to 0.76 for peak periods. Peak period is a statistically unstable parameter, particularly during times of low wave energy when it may be difficult to define a spectral peak, and would therefore be expected to produce lower correlations.

37. Although the NOAA buoys provided much needed information for the calibration of the winds and the verification of hindcast wave heights and periods, they unfortunately provided no information for the verification of hindcast wave directions. Nevertheless, based on the results of the calibration and verification phases, it is believed that the hindcast data are within the stated accuracy of the measured parameters and therefore represent a reliable estimate of the actual wave conditions.

PART VI: ESTIMATION OF ICE CONCENTRATION

38. Lake Superior is the largest and most northern of the five Great Lakes with a mean depth of 149 m, a length of 563 km, and a width of 257 km. During a "normal" Great Lakes winter, the ice cover on Lake Superior can reach 75 percent during the second half of February and remain as high as 50 percent through the end of March. One obvious effect of this extensive icing over is a reduction in open water, resulting in both the elimination of some or all of the 95 stations of interest and a significant change in the fetch lengths available for wave generation. The number and location of stations either lost or impacted by the reduced fetch depend on whether it is early, middle, or late winter.

39. Given the relatively high percentage of ice coverage experienced by Lake Superior during a normal winter, any effort to develop a long-term wave database would be incomplete without including the resulting effects. To accomplish this, additional model runs using ice-modified, land-water boundary data were made for the same 32-year period as the open-water hindcast.

40. Land-water matrix modification was made possible by using an extensive, 20-winter, digital data set compiled by the Great Lakes Environmental Research Laboratory (GLERL) of the NOAA (Assel et al. 1983). This database consists of ice concentration observations, beginning in the winter of 1960 and including all of the Great Lakes, made by both US and Canadian government agencies. The data are partitioned into nine half-month intervals starting with the latter half of December. Ice concentration values are given in increments of 10 percent from 0 (open water) to 100 (total ice cover) for individual grid cells measuring 5 km square.

41. The GLERL analyzed each half-month data set to provide the maximum, minimum, average, median, and modal ice concentrations for each 5-km cell. The median value, which represents an estimate of the 50-percent point of the ice concentration probability distribution, is referred to as the "normal" winter ice concentration. This particular statistical value was chosen because it was "subjectively determined that the median ice concentration patterns provided the most coherent pattern of the progression of ice-cover formation and decay over the winter season" (Assel et al. 1983). It was decided, therefore, that the GLERL-derived, median ice concentration values

for each of the nine half-month time periods would provide the best data for modifying the original land-water boundary matrix.

42. The procedure for incorporating the progression and decay of the time-dependent ice cover was complicated by the fact that different grid cell sizes were used for mapping the ice concentration (5 by 5 km) and for hind-casting the waves (16 by 16 km). To facilitate a direct relationship, ice-concentration values from a block of nine grid cells (three by three) were averaged to produce one value corresponding to a cell that was approximately the same size as a hindcast grid cell. If the ice-concentration value in this larger cell was 50 percent or greater, it was considered, for modeling purposes, to be totally covered, and the corresponding hindcast grid point was changed from a water point to a land point.

43. This procedure resulted in the formation of nine half-month land-water boundary matrices reflecting the various stages of ice-cover development and decay (Figures 16a-i). The hindcast model was then re-run for the 32-year period, using the appropriate matrix for each date. The results were again summarized in the form of percent occurrence tables, mean and maximum monthly values, and return period statistics.*

* Appendices C (Percent Occurrence Tables, Ice Conditions), D (Mean and Maximum Monthly Values, Ice Conditions), and E (Return Period Tables, Ice Conditions) are available for loan by request from the WES Technical Information Center Library or the WIS Project Office, USAE Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.

PART VII: EXPLANATION OF SUMMARY TABLES

Percent Occurrence Tables

Description

44. Two types of tables are printed: azimuth tables and tables for all directions. The azimuth tables give the percent occurrence of waves in height and period ranges for specified direction bands at each station. The title of each table provides station identification and azimuth, or midpoint angle for each of the sixteen 22.5-deg direction bands (Table 10). The period ranges were derived from the period ranges available from the WIS hindcast model (Table 11), and the height ranges are in 0.50-m increments. Values in the azimuth tables represent the percentage of the 32-year period during which waves occur from the specified azimuth range for the indicated height and period ranges. The values have been multiplied by 1,000 to allow more accuracy while using less printing space. Summations of period and height ranges are provided in the last column and row of each table. The summations also have been multiplied by 1,000. The last line in each azimuth table contains the following information for the specified azimuth range and station:

- a. The mean wave height H .
- b. The largest H .
- c. The mean spectral peak period T_p .
- d. The number of cases (wave occurrences computed at 3-hr intervals over the length of the hindcast for that direction band).

45. The all-directions table for each station is printed following the 337.5-deg azimuth table for each station. This table gives the percent occurrence of waves within specified height and period ranges coming from all directions. Values in the all-directions table are multiplied by 100. The parameters listed in the last line of the table are derived from all directions for the full 32 years, and the total number of cases (93,504) is the number of cases calculated in the 32 years analyzed.

Use of the tables

46. The tables have been developed to produce the most detailed information available in a summary report.

Example

47. To find the number of hours that waves of 1.50 to 1.99 m and 4.0 to 4.9 sec are expected to occur from the 90.0-deg band at Sta 1 for the 32-year interval, the value read in the table for the specified station, azimuth, height, and period should first be divided by 1,000, which for this example yields 0.155 percent (Appendix A). Then 0.155 is divided by 100 to give the probability (0.00155) and multiplied by the number of hours for the 32-year interval (93,504 cases times 3 hr = 280,512 hr) to yield the number of hours that the specified wave is expected to occur. The simple conversion process is:

$$\frac{\text{Value read in table}}{1,000 \times 100} \times \begin{matrix} \text{number of hours} \\ \text{in time interval} \end{matrix} = \begin{matrix} \text{number of hours} \\ \text{specified wave is} \\ \text{expected to occur} \end{matrix}$$

For this example:

$$\frac{155}{1,000 \times 100} \times 280,512 \text{ hr} = 435 \text{ hr}$$

Wave Rose Diagrams

Description

48. The wave rose diagrams use wave height H and wave direction D and present analyses of the 32 years of hindcast data. The diagrams show the percent occurrence of H ranges from eight (45-deg) direction bands. The percentage of waves occurring from each direction for the specified station is displayed in a triangle at the end of each leg of the diagram.

49. As in most wave rose diagrams, the width of each bar segment indicates the H range, and the length of the bar segment indicates the percent occurrence of waves from the specified direction. The distance between each circle in the diagram is 20 percent. Each leg of the diagram represents 22.5 deg to either side of the primary direction of the leg. For example, the

leg to the north represents waves coming from 337.5 deg (NNW) through 0 deg (N) to 22.5 deg (NNE).

Use of the diagrams

50. The diagrams are intended as visual aids and are not appropriate for detailed analyses.

Example

51. The wave rose diagram for Sta 1 (Appendix A) indicates that 27 percent of the waves were from the southwest, 225-deg band (waves moving toward the northeast), and of the 27 percent, approximately 33 percent were 0.0 to 0.4 m, about 45 percent were 0.5 to 0.9 m, about 13 percent were 1.0 to 1.4 m, etc. The total for each leg is 100 percent for the specified direction.

Mean H , Largest H , and 32-Year Statistics Tables

Description

52. Two tables that summarize the mean and largest H for each month and year are provided for each station (Appendix A). The mean table also provides a mean monthly value and mean yearly value of H . The largest H table provides the largest H hindcast for each month in each year. The 32-year statistics tables provide the following:

- a. Mean H .
- b. Mean T_p .
- c. Most frequent D band .
- d. Standard deviation of H .
- e. Standard deviation of T_p .
- f. Largest H .
- g. T_p of largest H .
- h. D of largest H .
- i. Date and time (GMT) of largest H .

Use of the tables

53. The tables can be used as a quick reference in determining estimates of the wave climate in an area.

Example

54. To determine the mean H at Sta 1 for January 1956, simply read the value in the specified column and row (Appendix A). The mean H for 1956 is given in the MEAN column opposite 1956. The mean H for all January's is given in the MEAN row under JAN. For this example:

- a. The mean H for JAN 1956 = 0.8 m .
- b. The mean H for 1956 = 0.8 m .
- c. The mean H for all JAN's = 0.9 m .

The largest H table can be read in a similar fashion, and by scanning the columns and rows, additional information can be determined:

- a. The largest H for JAN 1956 = 2.6 m
- b. The largest H for 1956 = 4.7 m
- c. The largest H for all JAN's = 6.0 m

Return Period Tables

Description

55. An analysis of extreme storm wave heights was performed for each of the save stations. The procedure, developed by Goda (1988) and currently available in CERC's Automated Coastal Engineering System, fits five candidate probability distributions to a series of ranked extreme wave heights. In the present study, a Fisher-Tippett Type I distribution was chosen because it provided the best overall match to the input data. The 32-year extremal statistic tables (Appendix B) are in the following format:

- a. Wave heights for recurrence intervals of 2, 5, 10, 20, and 50 years are listed.
- b. The standard error of wave height for the specified return period is included in parentheses next to each wave height estimate.
- c. Angle Classes 1, 2, and 3 are defined as viewed by an observer on shore (Figure 17):
 - (1) Angle Class 1 - Mean wave approach angle greater than 30 deg to right of normal to shore.
 - (2) Angle Class 2 - Mean wave approach angle within 30 deg to either side of normal to shore.

(3) Angle Class 3 - Mean wave approach angle greater than 30 deg to left of normal to shore.

(4) Angle Class All - includes all directions.

56. Table 12 lists the azimuths of the vectors normal to the shoreline for each station.

Use of the table

57. Estimates of extreme wave heights and their standard errors can simply be read from the table for the desired return period and station. Table 13 provides the factor by which the standard error should be multiplied to obtain bounds for various levels of confidence and the corresponding probability of exceeding the upper bound. Table 14 can be used to find the probability of one or more waves, or larger waves, of a specified return period occurring within 1, 10, 25, or 50 years.

Example

58. Wave height values for specified return periods are simply read from the table for the desired station. For example, the 50-year maximum for Sta 3, Angle Class 1, is 6.5 m. The 50-year maximum for Sta 3, all directions, is 6.6 m. Table 14 shows that the 6.6-m extreme wave height has a probability of 0.18 of being equaled or exceeded at least once in 10 years.

PART VIII: RESULTS

59. A 32-year time series of historical wave heights, periods, and directions has been developed for Lake Superior using the latest version of The Coastal Engineering Research Center's deepwater wave model. The data presented in this report, in the form of graphs and tables, serve to verify the hindcast procedure as well as present a concise and useful summary of a very large data set.

60. Information contained in this report can be quite useful for initial assessments, but users must keep in mind that the results from this hindcast represent deepwater conditions, and, as such, should be used only as approximations to coastal conditions. For detailed coastal wave information, such as that required for the design, construction, operation, and maintenance of coastal structures, one must take advantage of the full two-dimensional spectrum (available on magnetic tape) from the nearest deepwater point and use an appropriate shallow-water wave transformation model to bring the waves to the point of interest.

61. One of the more important parameters reported is the return period wave height. It is often this extreme value that guides the design of many coastal structures, such as selection of the appropriate rock size for a jetty or breakwater. Coastal engineers, both within the COE and in the private sector, responsible for the design of coastal structures on the Great Lakes have relied heavily on the results of RV for estimates of extreme waves. The return period wave heights estimated in this study were compared with those reported in RV. The results, illustrated in Figure 18 and listed in Table 15, compare the wave heights at co-located stations for return periods of 5, 10, 20, and 50 years, respectively. Each plot shows a similar pattern, with the return period wave heights from the present study (WIS) consistently higher than the RV return period wave heights. Although each study exhibits a similar trend, the differences range from very little at Sta 1, 2, and 3 to over 4 m at Sta 47, 48, and 49.

62. The low wave heights predicted by the present study for Sta 43, 59, 60, and 61 are the result of station location. Each is sheltered from the effects of the dominant winds, Sta 43 by the Keweenaw Peninsula and Sta 59, 60, and 61 by Whitefish Point and several small islands.

63. The large waves predicted for Sta 46 through 52 are the direct result of an intense winter storm that caused widespread damage in the Upper Great Lakes during the period 27-29 November 1966. Winds of 30 to 35 m/sec from the north-northeast and waves of 8 m were reported by ships in eastern Lake Superior. The fetch length to the north-northeast of these stations is on the order of 250 km, sufficient distance, according to the SPM (1984) nomograms for deepwater wave height prediction, for winds of this magnitude to generate 10- to 11-m waves. These curves represent monochromatic wave conditions and do serve to indicate, particularly when coupled with ship observations, that the return period wave heights reported in the present study (WIS) are realistic and that, perhaps, the RV estimates are low.

64. The wave data presented in this report are the result of a substantial effort to develop, numerically, the long-term wave climate for Lake Superior. Based on statistical and time-series comparisons with a large amount of measured data, the reported data are considered to be an accurate and reliable wave database and will prove essential to current and future coastal engineering and navigational projects on Lake Superior.

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Table 1
Lake Superior Stations

<u>Station</u>	<u>Latitude, deg N</u>	<u>Longitude, deg W</u>
1	47.95	89.42
2	47.80	89.63
3	47.80	89.84
4	47.67	90.07
5	47.67	90.28
6	47.67	90.50
7	47.53	90.70
8	47.53	90.92
9	47.38	90.92
10	47.38	91.13
11	47.23	91.13
12	47.08	91.35
13	47.08	91.57
14	46.95	91.57
15	46.80	92.00
16	46.80	91.78
17	46.80	91.57
18	46.95	91.35
19	46.95	91.13
20	47.08	90.92
21	47.08	90.50
22	46.95	90.50
23	46.80	90.50
24	46.65	90.50
25	46.65	90.28
26	46.80	90.07
27	46.95	89.84
28	46.95	89.63
29	46.95	89.42
30	47.08	89.22
31	47.08	89.00
32	47.23	88.78
33	47.38	88.57
34	47.53	88.35
35	47.53	88.13
36	47.53	87.93
37	47.53	87.72
38	47.53	87.50
39	47.35	87.50
40	47.38	87.72
41	47.23	87.93
42	47.08	88.13

(Continued)

(Sheet 1 of 3)

Table 1 (Continued)

<u>Station</u>	<u>Latitude, deg N</u>	<u>Longitude, deg W</u>
43	46.95	88.35
44	46.95	87.93
45	46.95	87.72
46	46.80	87.50
47	46.65	87.28
48	46.65	87.07
49	46.65	86.85
50	46.65	86.65
51	46.65	86.43
52	46.80	86.22
53	46.80	86.00
54	46.80	85.78
55	46.80	85.57
56	46.80	85.37
57	46.80	85.15
58	46.80	84.93
59	46.63	84.93
60	46.48	84.72
61	46.63	84.72
62	46.80	84.72
63	46.95	84.72
64	47.08	84.93
65	47.23	84.72
66	47.38	84.93
67	47.53	85.15
68	47.67	85.15
69	47.80	85.15
70	47.95	85.15
71	47.80	85.37
72	47.80	85.57
73	47.80	85.78
74	47.95	86.00
75	48.08	86.22
76	48.23	86.22
77	48.38	86.43
78	48.52	86.43
79	48.67	86.43
80	48.67	86.65
81	48.67	86.45
82	48.67	87.28
83	48.67	87.50
84	48.67	87.72

(Continued)

(Sheet 2 of 3)

Table 1 (Concluded)

<u>Station</u>	<u>Latitude, deg N</u>	<u>Longitude, deg W</u>
85	48.67	87.93
86	48.52	88.13
87	48.38	88.35
88	48.23	88.57
89	48.23	88.78
90	48.08	89.00
91	48.08	89.22
92	47.38	89.45
93	47.67	88.78
94	47.95	87.50
95	47.23	86.43

(Sheet 3 of 3)

Table 2
Lake Superior Input Wind Stations
and Period of Record

<u>Station</u>	<u>Period of Record</u>
Duluth	1956 - 1987
Houghton	1956 - 1964 1973 - 1987
K. I. Sawyer	1957 - 1958 1960 - 1970 1973 - 1987
Sault St. Marie	1956 - 1987
Wawa	1977 - 1986
White River	1956 - 1975
Slate Island	1967 - 1975 1979 - 1986
Thunder Bay	1956 - 1986

Table 3
Air-Sea Temperature Differences (°C)

<u>Dir.</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
E	-12.7	-5.4	2.0	0.1	1.3	3.2	3.2	1.2	-1.9	-3.0	-5.5	-9.8
	-12.9	-8.5	-4.0	0.4	1.7	2.7	3.3	0.8	-2.0	-2.8	-5.6	-10.2
	-14.2	-9.4	-4.5	0.3	1.7	3.3	3.4	1.3	-1.4	-2.1	-5.1	-10.2
	-11.0	-7.2	-3.4	0.4	1.9	3.3	2.9	1.2	-1.1	-2.2	-4.9	-9.7
	-11.0	-7.1	-3.3	0.6	1.9	3.4	3.7	1.1	-0.6	-2.0	-4.9	-9.4
	-10.7	-6.9	-3.2	0.6	2.3	3.5	3.9	1.3	-0.5	-1.7	-4.7	-7.7
	-11.4	-9.0	-13.0	0.8	2.6	3.6	3.4	1.7	-0.4	-1.8	-3.8	-7.3
	-6.7	-6.0	-2.2	1.6	2.7	3.8	4.2	1.7	-0.5	-1.5	-3.0	-6.0
	-6.0	-3.7	-1.4	0.9	3.0	4.5	5.0	2.6	0.1	-0.3	-3.2	-6.0
	-9.6	-5.8	-2.0	1.8	2.8	4.5	4.5	2.6	0.5	-0.4	-3.1	-6.4
N	-10.0	-4.0	-1.0	2.4	3.5	4.9	4.8	2.7	0.6	0.0	-3.0	-5.0
	-9.3	-3.0	-5.0	2.6	4.2	5.5	5.4	2.6	1.4	-0.1	-2.9	-4.8
	-4.4	-3.0	0.0	3.0	4.4	5.1	5.7	2.9	1.2	0.7	-1.7	-4.4
	-4.6	-5.0	-1.2	2.7	4.5	5.3	5.7	2.7	0.9	0.6	-2.1	-5.0
	-6.9	-6.0	-1.9	2.3	4.4	5.4	5.6	2.5	0.9	0.5	-1.8	-5.0
	-4.3	-6.0	-1.0	2.3	4.0	5.8	5.9	3.1	1.4	0.7	-2.3	-5.2
	-8.9	-9.0	-4.0	2.2	4.0	5.5	5.8	3.2	1.5	0.8	-2.2	-5.6
	-10.1	-5.9	-1.6	2.6	4.0	6.1	6.3	3.3	2.0	1.0	-2.4	-6.2
	-8.4	-7.2	-6.0	2.2	4.4	6.5	6.0	3.7	1.6	1.2	-2.6	-6.0
	-8.9	-4.9	-1.0	2.1	3.9	5.9	6.2	3.7	1.9	1.1	-2.6	-5.4
W	-7.1	-3.0	-0.5	2.0	4.2	5.7	6.4	3.6	1.5	0.2	-3.0	-5.6
	-5.8	-3.4	-1.0	2.1	3.7	5.3	6.1	4.0	1.3	0.3	-3.1	-6.1
	-8.4	-4.6	-0.7	3.1	4.1	5.6	6.1	3.5	1.1	-0.3	-3.1	-6.7
	-8.7	-5.3	-1.9	1.5	3.6	5.1	5.9	3.5	1.0	-0.3	-3.2	-6.5
	-8.1	-5.0	-10.0	2.0	3.5	5.3	5.6	3.6	1.0	-0.3	-2.7	-7.3
	-9.4	-5.9	-2.3	1.2	3.7	4.7	5.3	3.4	0.4	-0.4	-3.5	-6.6
	-9.2	-8.0	-2.9	2.1	2.7	4.4	5.1	2.8	0.3	-0.7	-3.5	-7.5
	-12.0	-4.0	-1.5	1.0	2.4	4.1	4.9	2.1	0.3	-0.9	-4.0	-8.7
	-10.9	-12.5	-5.6	1.2	2.3	3.6	4.2	2.1	0.1	-1.5	-4.8	-8.6
	-13.3	-10.3	-4.4	1.4	2.1	3.7	4.6	1.9	-0.7	-2.1	-5.5	-8.2
S	-14.1	-12.0	-5.4	1.1	2.2	3.8	3.7	2.2	-1.0	-2.8	-6.0	-10.9
	-14.0	-8.0	-3.7	0.6	1.9	3.8	3.5	1.7	-1.0	-2.7	-6.4	-10.3
	-12.0	-9.0	-4.2	0.6	1.5	3.7	3.9	1.3	-1.7	-3.2	-6.6	-10.4
	-12.9	-5.0	-2.4	0.1	1.5	3.9	3.6	1.4	-1.4	-2.9	-6.1	-10.2
	-12.0	-8.0	-4.1	-0.1	1.5	3.5	3.5	1.0	-1.7	-2.7	-6.1	-9.9
	-13.0	-7.0	-3.3	0.5	1.2	3.5	3.5	1.0	-1.2	-3.2	-6.0	-10.2

Note: Columns represent averages of air-sea temperature differences by month. Rows represent averages of air-sea temperature differences by wind vector direction within 10-deg classes (Class 1 = due east, 10 = due north, 19 = due west, 28 = due south).

Table 4

Wave Height Statistics, Lake Superior, 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45006, m</u>	<u>WIS Sta 92, m</u>
Mean	0.64	0.68
Std dev about mean	0.57	0.53
Maximum value	5.00	4.50
Rmse	0.41	
Correlation coefficient	0.73	
Scatter index	0.64	
Least squares (x - buoy, y - WIS)		
Slope	0.68	
Intercept	0.25	
No. Observations	7,232	

Table 5

Peak Period Statistics, Lake Superior, 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45006, sec</u>	<u>WIS Sta 92, sec</u>
Mean	3.84	3.83
Std dev about mean	1.19	1.17
Maximum value	10.00	9.00
Rmse	1.01	
Correlation coefficient	0.63	
Scatter index	0.26	
Least squares (x - buoy, y - WIS)		
Slope	0.62	
Intercept	1.45	
No. Observations	7,232	

Table 6
Wave Height Statistics, Lake Superior, 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45001, m</u>	<u>WIS Sta 94, m</u>
Mean	0.87	0.94
Std dev about mean	0.70	0.74
Maximum value	5.70	5.80
Rmse		0.40
Correlation coefficient		0.85
Scatter index		0.46
Least squares (x = buoy, y = WIS)		
Slope		0.89
Intercept		0.16
No. Observations		7,827

Table 7
Peak Period Statistics, Lake Superior, 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45001, sec</u>	<u>WIS Sta 94, sec</u>
Mean	4.27	4.41
Std dev about mean	1.40	1.31
Maximum value	11.10	10.00
Rmse		0.95
Correlation coefficient		0.76
Scatter index		0.22
Least squares (x = buoy, y = WIS)		
Slope		0.72
Intercept		1.35
No. Observations		7,827

Table 8
Wave Height Statistics
Lake Superior 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45004, m</u>	<u>WIS Sta 95, m</u>
Mean	0.75	0.88
Std dev about mean	0.71	0.68
Maximum value	6.90	5.20
Rmse	0.44	
Correlation coefficient	0.82	
Scatter index	0.59	
Least squares (x = buoy, y = WIS)		
Slope	0.77	
Intercept	0.30	
No. Observations	5,954	

Table 9
Peak Period Statistics, Lake Superior, 1981-1986

<u>Statistical Parameters</u>	<u>Buoy 45004, sec</u>	<u>WIS Sta 95, sec</u>
Mean	4.13	4.37
Std dev about mean	1.25	1.26
Maximum value	10.00	9.00
Rmse	1.00	
Correlation coefficient	0.70	
Scatter index	0.24	
Least squares (x = buoy, y = WIS)		
Slope	0.71	
Intercept	1.45	
No. Observations	5,954	

Table 10
Ranges for Direction Intervals in
Percent Occurrence Tables

<u>Midband</u> <u>deg</u>	<u>Range</u> <u>deg</u>			
0.0	348.75	< D <	11.25	
22.5	11.25	< D <	33.75	
45.0	33.75	< D <	56.25	
67.5	56.25	< D <	78.75	
90.0	78.75	< D <	101.25	
112.5	101.25	< D <	123.75	
135.0	123.75	< D <	146.25	
157.5	146.25	< D <	168.75	
180.0	168.75	< D <	191.25	
202.5	191.25	< D <	213.75	
225.0	213.75	< D <	236.25	
247.5	236.25	< D <	258.75	
270.0	258.75	< D <	281.25	
292.5	281.25	< D <	303.75	
315.0	303.75	< D <	326.25	
337.5	326.25	< D <	348.75	

Table 11
Frequency Ranges Used in WIS Hindcast Model

<u>Midband</u>		<u>Band Range</u>	<u>Period</u> <u>sec</u>	<u>Grouping for Percent</u> <u>Occurrence Tables</u> <u>sec</u>
<u>Frequency</u> <u>Hz</u>	<u>Period</u> <u>sec</u>			
0.50	2.0	1.71 < T < 2.41		< 3.0
0.33	3.0	2.41 < T < 3.45		3.0 - 3.9
0.25	4.0	3.45 < T < 4.26		4.0 - 4.9
0.22	4.5	4.26 < T < 4.65		
0.21	4.8	4.65 < T < 4.88		
0.20	5.0	4.88 < T < 5.13		5.0 - 5.9
0.19	5.3	5.13 < T < 5.41		
0.18	5.6	5.41 < T < 5.71		
0.17	5.9	5.71 < T < 6.06		
0.16	6.3	6.06 < T < 6.45		6.0 - 6.9
0.15	6.6	6.45 < T < 6.90		
0.14	7.1	6.90 < T < 7.41		7.0 - 7.9
0.13	7.7	7.41 < T < 8.00		
0.12	8.3	8.00 < T < 8.70		8.0 - 8.9
0.11	9.1	8.70 < T < 9.52		9.0 - 9.9
0.10	10.0	9.52 < T < 10.52		10.0 - 10.9
0.09	11.1	10.52 < T < 11.76		11.0 - longer
0.08	12.5	11.76 < T < 13.24		
0.07	14.3	13.24 < T < 15.36		
0.06	16.7	15.36 < T < 18.15		

Table 12
Azimuth of Vectors Normal to the Shoreline

<u>Station Location</u>	<u>Azimuth</u>	<u>Station Location</u>	<u>Azimuth</u>
1	144	27	342
2	147	28	341
3	155	29	328
4	164	30	329
5	162	31	316
6	160	32	317
7	148	33	317
8	141	34	329
9	140	35	350
10	145	36	3
11	133	37	33
12	137	38	59
13	139	39	25
14	135	40	151
15	141	41	141
16	336	42	125
17	332	43	124
18	336	44	7
19	333	45	15
20	348	46	60
21	50	47	45
22	42	48	0
23	40	49	2
24	325	50	323
25	337	51	326
26	317	52	337

(Continued)

Table 12 (Concluded)

<u>Station Location</u>	<u>Azimuth</u>	<u>Station Location</u>	<u>Azimuth</u>
53	348	75	237
54	2	76	246
55	0	77	249
56	333	78	233
57	0	79	241
58	60	80	180
59	92	81	168
60	332	82	186
61	296	83	180
62	290	84	182
63	265	85	127
64	284	86	137
65	335	87	118
66	230	88	157
67	223	89	161
68	284	90	148
69	294	91	122
70	180	92	154
71	159	93	317
72	180	94	188
73	200	95	337
74	220		

Table 13
Confidence Interval Bounds for Extreme
Wave Heights

<u>Confidence Level</u>	<u>Bounds Around</u> <u>Wave Height</u>	<u>Probability of</u> <u>Exceeding Upper Bound. %</u>
80	+/-1.28	10.0
85	+/-1.44	7.5
90	+/-1.65	5.0
95	+/-1.96	2.5
99	+/-2.58	0.5

Table 14
Probabilities of Extreme Wave Heights*

<u>Return Period</u> <u>years</u>	<u>Probability of Wave Height Being Equaled or</u> <u>Exceeded at Least Once in Given Number of Years</u>			
	<u>1</u>	<u>10</u>	<u>25</u>	<u>50</u>
5	0.20	0.89	>0.99	>0.99
10	0.10	0.65	0.94	>0.99
20	0.05	0.40	0.71	0.90
50	0.02	0.18	0.40	0.61

* From Reich (1983).

Table 15
Return Period Wave Heights from RV
and Present Study (WIS)

Station		Return Period, years							
No.		5		10		20		50	
RV	WIS	RV	WIS	RV	WIS	RV	WIS	RV	WIS
1	1	5.3	5.7	5.5	6.1	5.8	6.4	6.1	6.8
2	2	5.8	5.6	6.3	5.9	6.7	6.2	7.3	6.6
3	3	5.8	5.6	6.3	5.9	6.7	6.2	7.3	6.6
4	4	5.9	7.9	6.3	8.4	6.8	9.0	7.4	9.7
5	5	5.9	8.1	6.3	8.7	6.8	9.3	7.2	10.1
6	6	5.9	8.0	6.3	8.5	6.8	9.1	7.4	9.8
7	7	6.2	7.8	6.5	8.3	6.9	8.9	7.3	9.6
8	8	6.0	7.8	6.4	8.3	6.8	8.8	7.3	9.5
9	10	6.0	6.8	6.3	7.2	6.6	7.6	7.0	8.1
10	12	6.0	7.5	6.3	8.0	6.7	8.5	7.2	9.1
11	13	5.6	7.1	5.9	7.4	6.2	7.8	6.6	8.3
12	14	5.5	6.5	5.7	7.1	6.0	7.6	6.5	8.3
13	15	5.8	5.5	6.0	6.0	6.3	6.5	6.7	7.2
14	16	4.4	5.8	4.6	6.4	4.8	6.9	5.1	7.7
15	17	3.9	6.2	4.2	6.8	4.4	7.4	4.7	8.2
16	18	4.2	6.4	4.5	7.0	4.8	7.6	5.2	8.3
17	19	3.8	5.8	4.2	6.3	4.5	6.8	4.8	7.5
18	20	4.0	6.6	4.2	6.9	4.4	7.3	4.8	7.8
19	21	4.1	6.0	4.3	6.3	4.6	6.6	4.9	7.0
20	23	4.6	5.5	5.0	5.8	5.3	6.2	5.8	6.6
21	24	3.9	5.4	4.1	5.7	4.2	6.0	4.5	6.5
22	25	4.2	5.3	4.5	5.6	4.7	5.9	5.1	6.3
23	26	4.1	5.5	4.3	5.8	4.6	6.2	5.0	6.6
24	27	4.9	6.0	5.2	6.3	5.5	6.6	5.9	7.1
25	28	5.0	6.0	5.3	6.3	5.5	6.6	6.0	7.0
26	29	5.3	6.2	5.5	6.5	5.8	6.8	6.1	7.2
27	30	5.2	6.5	5.5	6.8	5.7	7.1	6.0	7.5
28	31	5.4	6.6	5.6	6.9	5.9	7.2	6.3	7.7
29	32	5.3	6.7	5.5	7.0	5.8	7.3	6.2	7.7
30	33	5.3	6.9	5.5	7.2	5.7	7.6	6.0	8.0
31	34	4.9	7.3	5.1	7.6	5.3	8.0	5.7	8.5
32	35	4.7	7.0	5.0	7.4	5.3	7.7	5.7	8.1
33	36	4.5	6.8	4.8	7.1	5.1	7.4	5.6	7.9
34	37	4.3	6.6	4.7	6.9	5.0	7.2	5.5	7.6
35	39	5.4	5.8	5.8	6.0	6.1	6.2	6.1	6.5
36	40	5.5	5.9	5.9	6.2	6.2	6.5	6.7	7.0
37	41	5.4	6.1	5.8	6.5	6.2	6.9	6.7	7.4
38	42	5.5	6.4	5.9	6.8	6.3	7.2	6.9	7.8
39	43	4.7	3.5	5.0	3.7	5.3	3.9	5.7	4.2

(Continued)

Table 15 (Concluded)

<u>Station</u>		<u>Return Period, years</u>							
<u>No.</u>		<u>5</u>		<u>10</u>		<u>20</u>		<u>50</u>	
<u>RV</u>	<u>WIS</u>	<u>RV</u>	<u>WIS</u>	<u>RV</u>	<u>WIS</u>	<u>RV</u>	<u>WIS</u>	<u>RV</u>	<u>WIS</u>
40	44	4.4	6.5	4.8	6.8	5.1	7.2	5.6	7.7
41	45	4.8	6.5	5.2	6.8	5.7	7.1	6.3	7.5
42	46	4.9	7.9	5.4	8.3	5.8	8.6	6.3	9.1
43	47	5.1	8.9	5.5	9.3	5.9	9.8	6.4	10.3
44	48	5.2	9.2	5.5	9.7	5.9	10.2	6.3	10.8
45	49	5.1	9.0	5.4	9.5	5.7	10.0	6.1	10.6
46	50	5.3	8.8	5.5	9.2	5.9	9.7	6.3	10.3
47	51	5.4	8.5	5.7	8.9	6.0	9.3	6.5	9.9
48	52	5.5	7.3	5.9	7.6	6.3	8.0	6.7	8.4
49	53	5.5	6.9	5.9	7.1	6.2	7.4	6.6	7.7
50	54	5.5	6.9	5.9	7.2	6.2	7.4	6.6	7.8
51	55	5.6	7.1	5.9	7.3	6.2	7.6	6.5	8.0
52	56	5.6	7.3	5.9	7.7	6.1	7.9	6.4	8.3
53	57	5.3	7.6	5.5	7.9	5.8	8.2	6.2	8.6
54	59	3.0	3.6	3.1	3.7	3.3	3.9	3.5	4.1
55	60	3.9	5.0	4.2	5.2	4.5	5.4	4.9	5.7
56	61	3.0	4.6	3.2	4.8	3.4	5.1	3.6	5.3
57	62	5.5	7.9	5.7	8.2	6.0	8.5	6.5	9.0

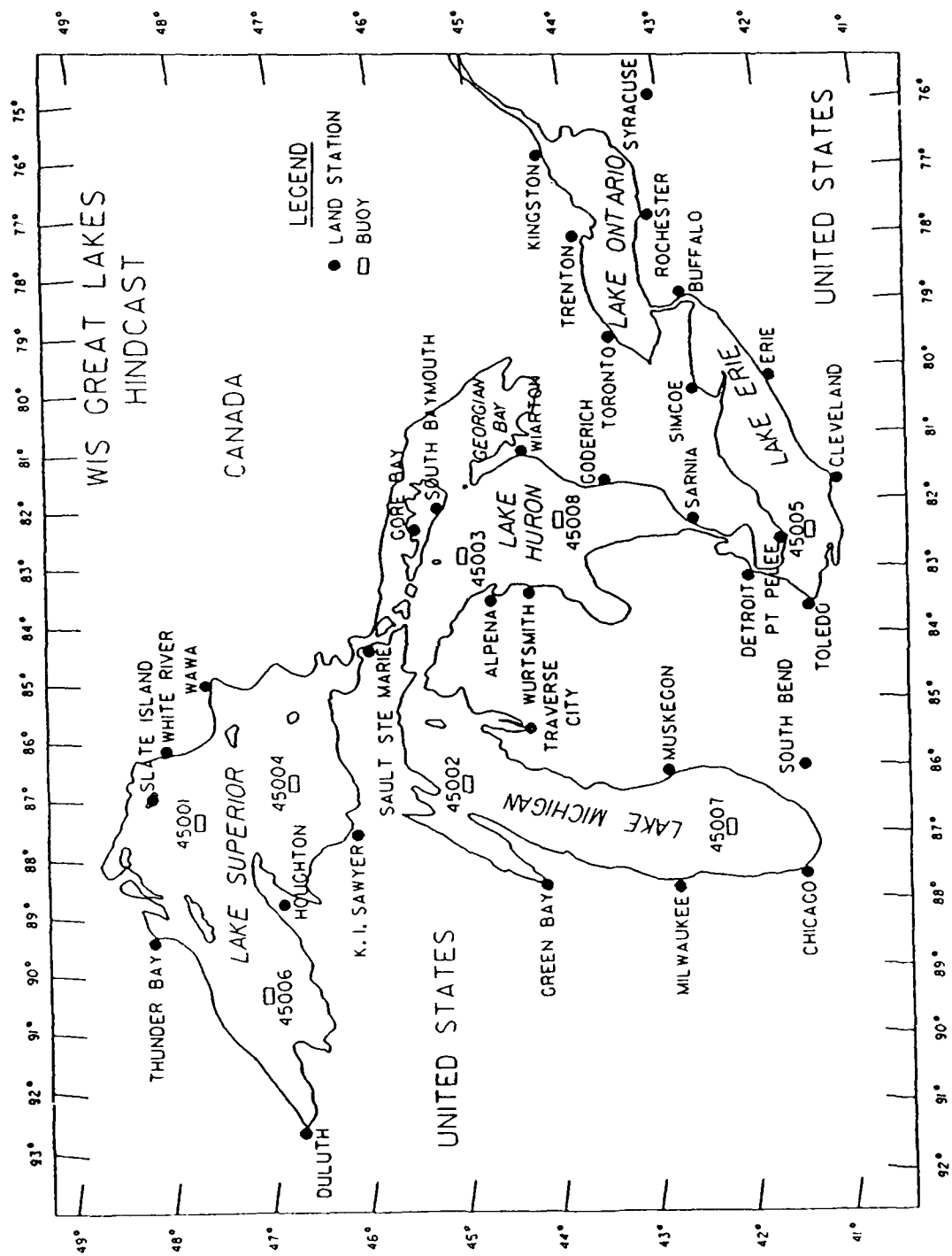


Figure 1. Location map showing placement of NOAA buoys

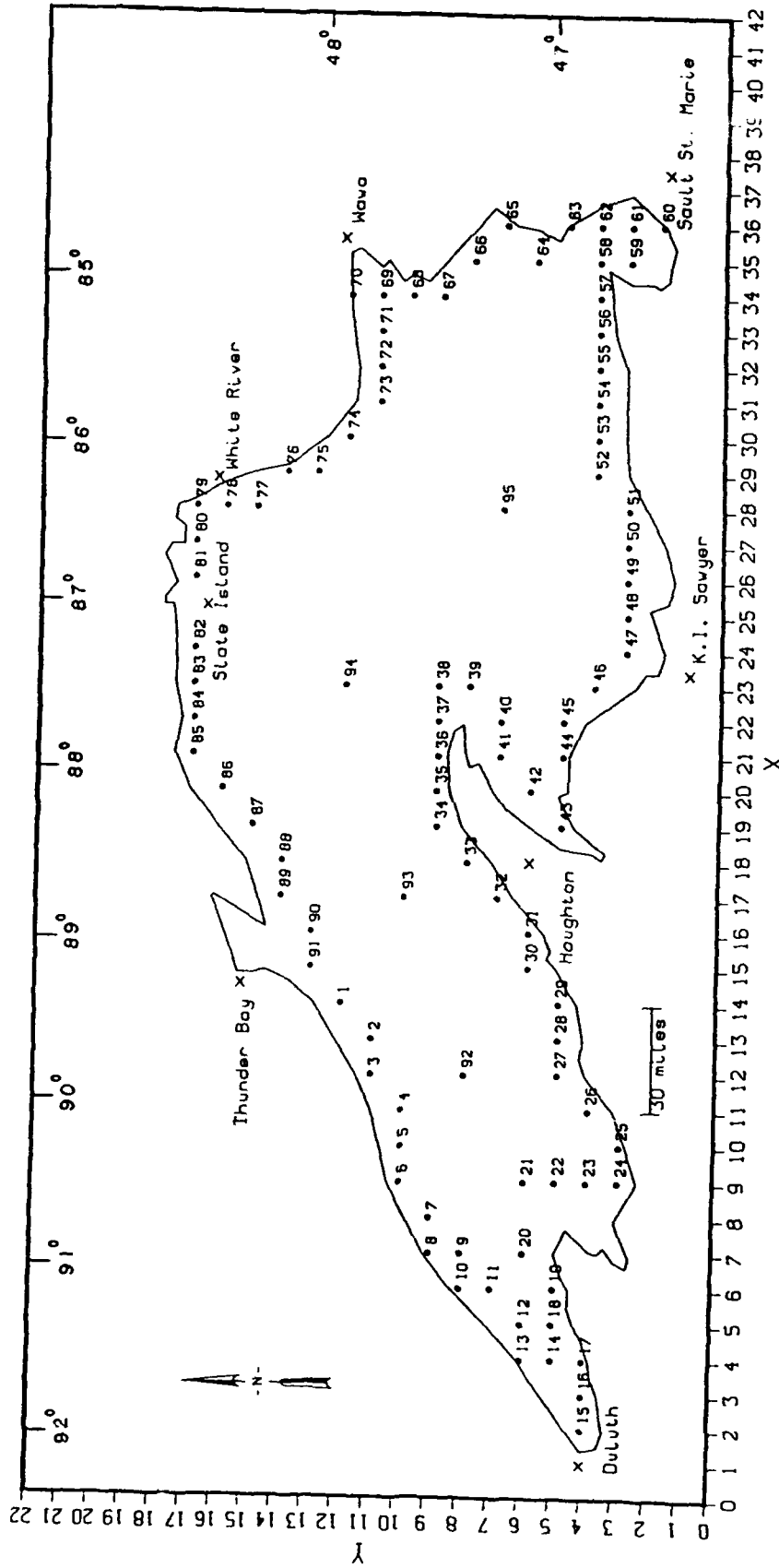


Figure 2. Station location map for Lake Superior

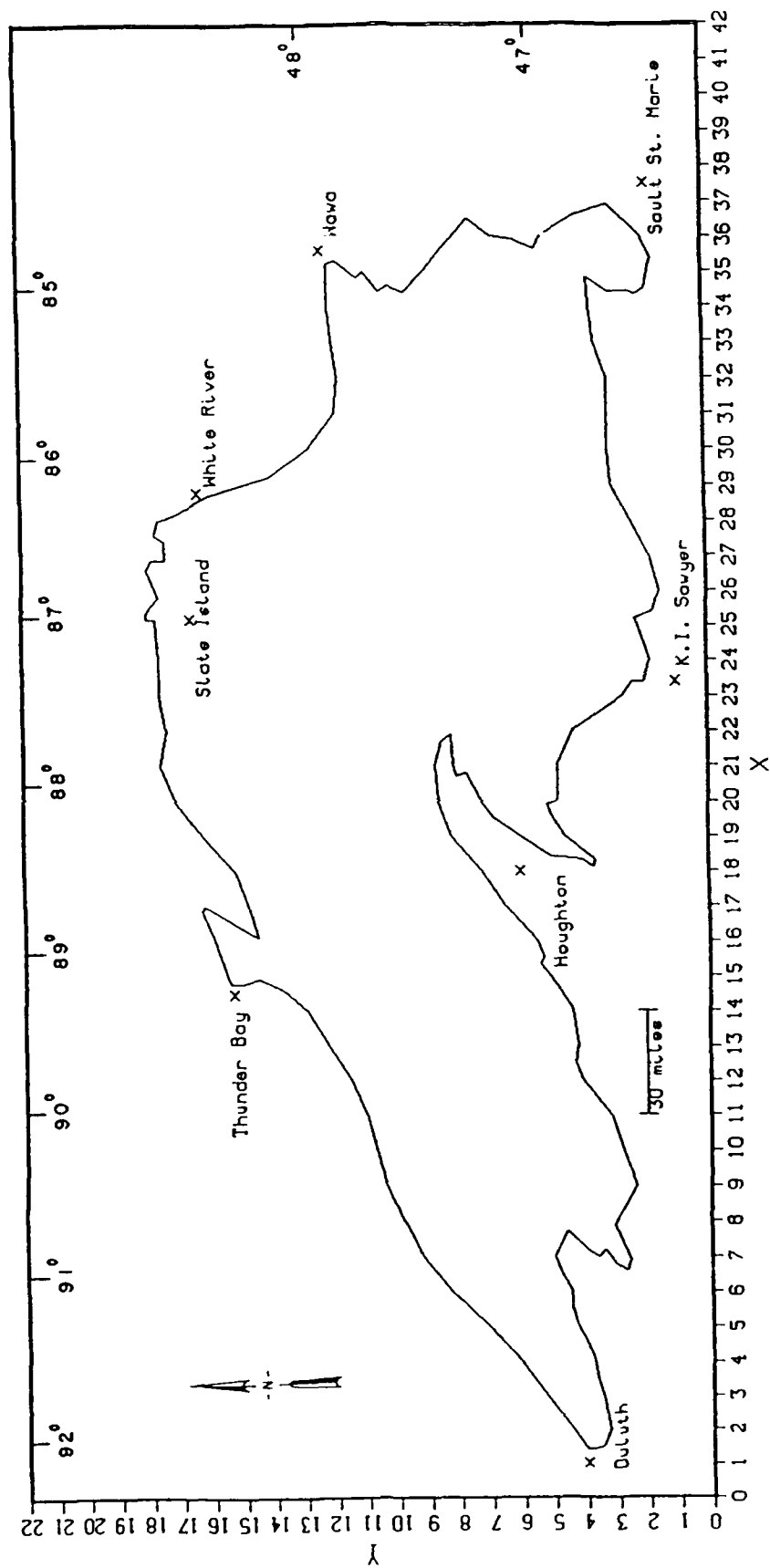


Figure 3. Location of input wind stations listed in Table 2

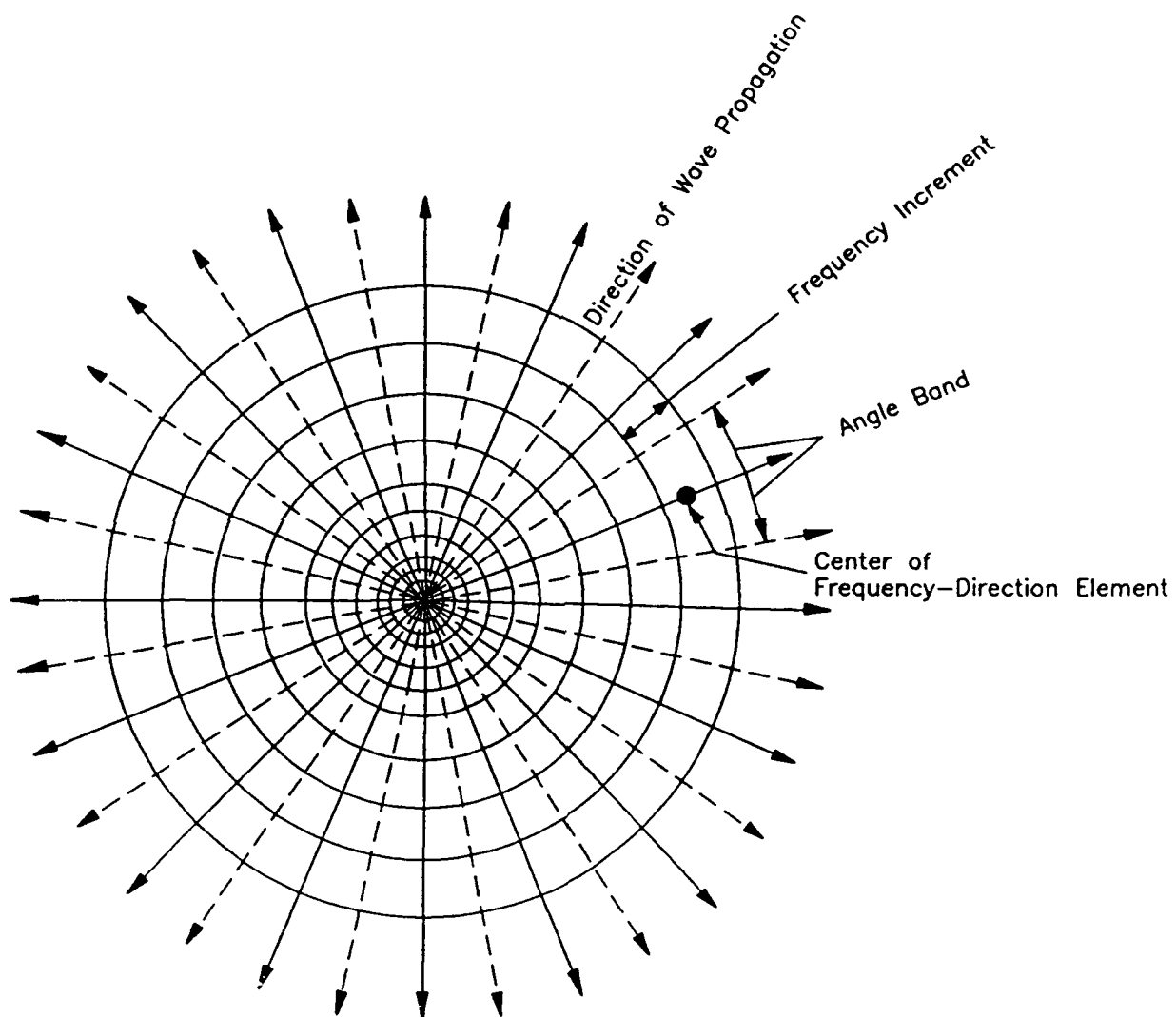


Figure 4. Schematic representation of directional spectrum

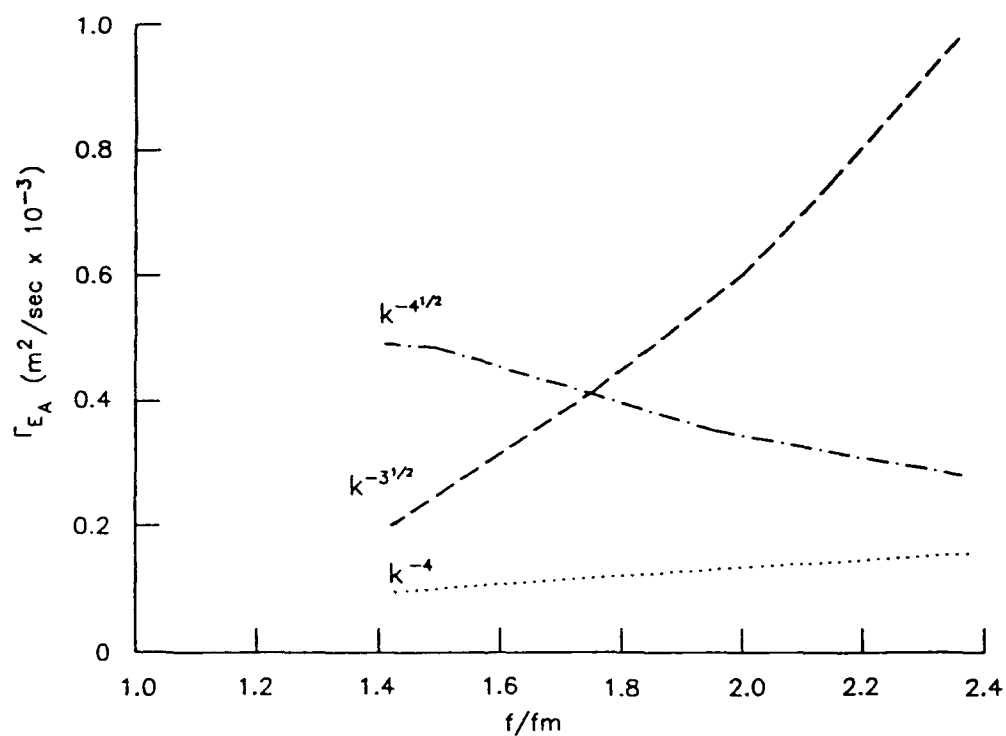


Figure 5. Calculated energy fluxes through the spectrum based on the complete Boltzmann integral

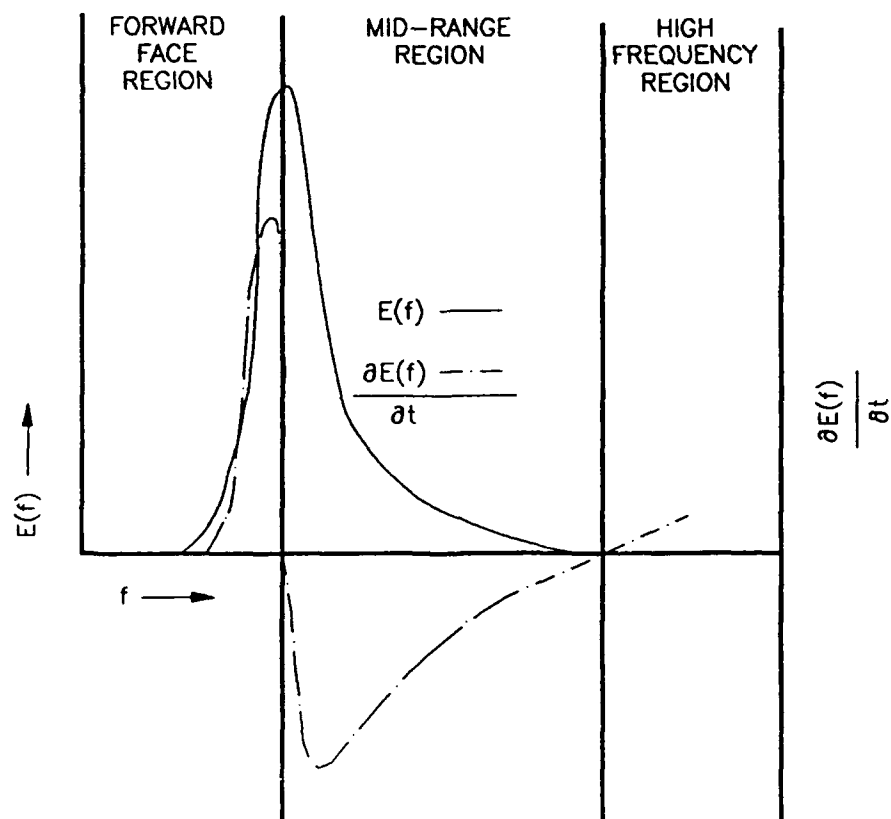
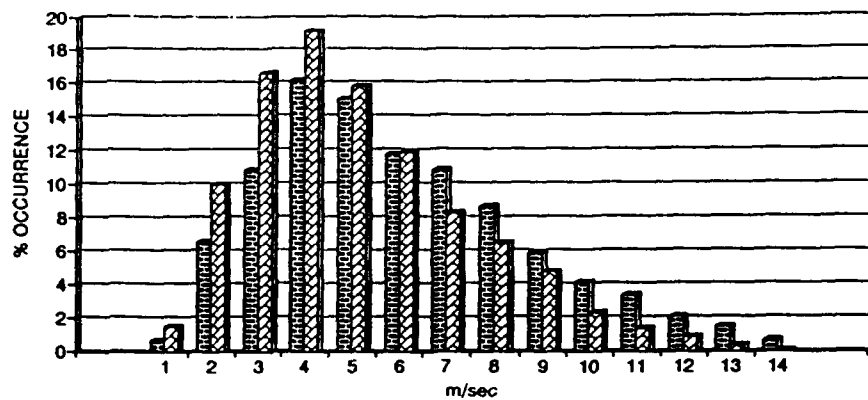
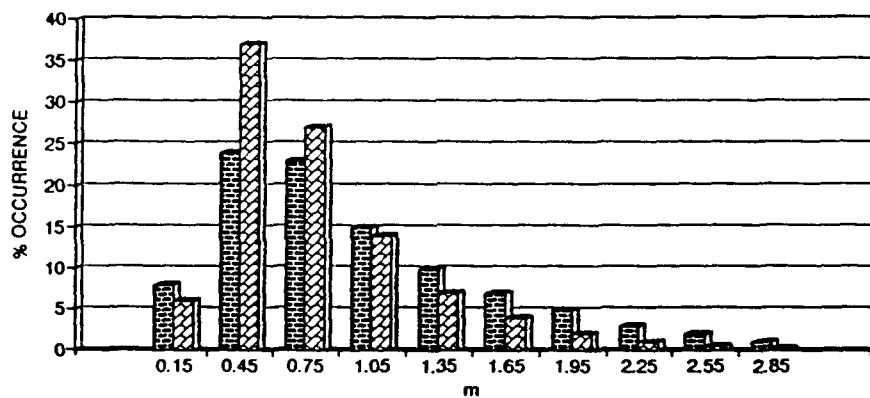


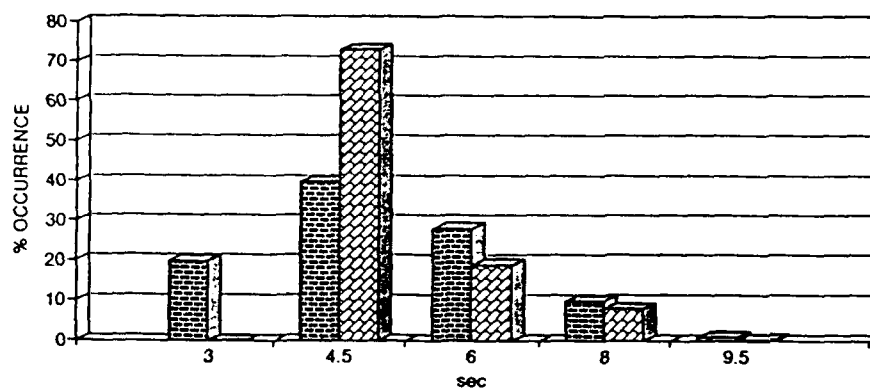
Figure 6. Nonlinear energy transfer as a function of frequency



a. Wind speed



b. Wave height



c. Peak period

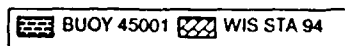
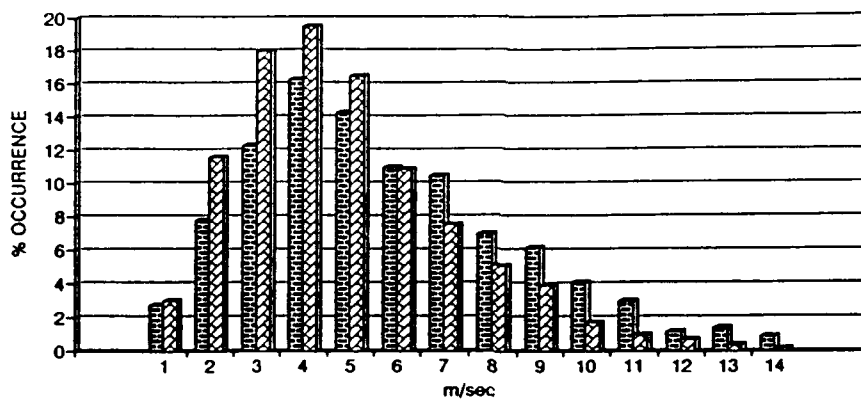
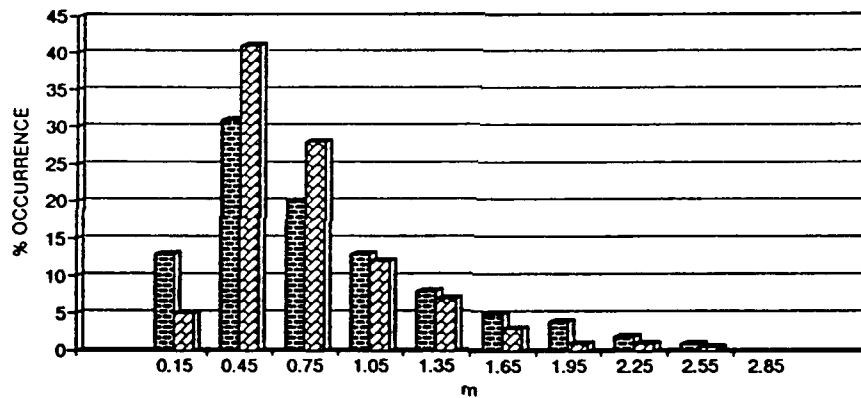


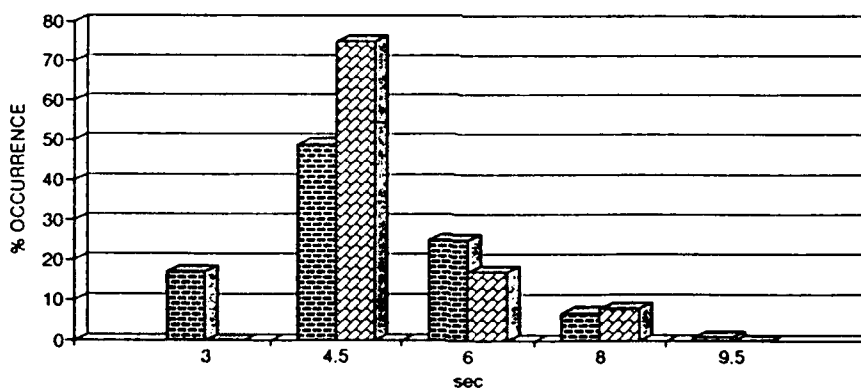
Figure 7. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 94



a. Wind speed



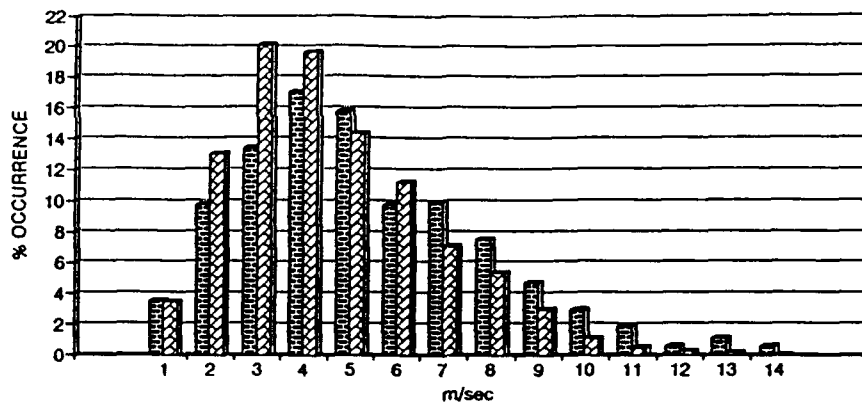
b. Wave height



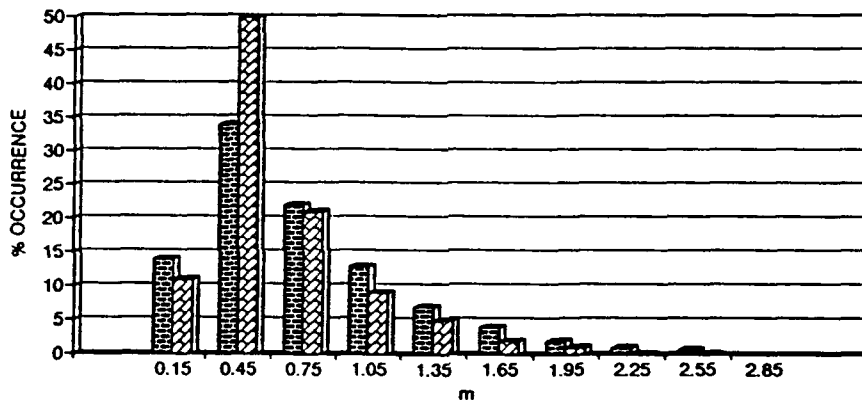
c. Peak period

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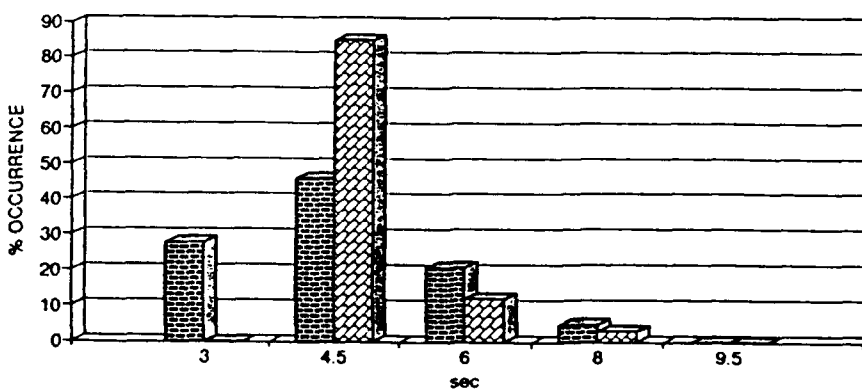
Figure 8. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 95



a. Wind speed



b. Wave height



c. Peak period

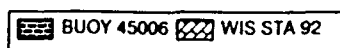
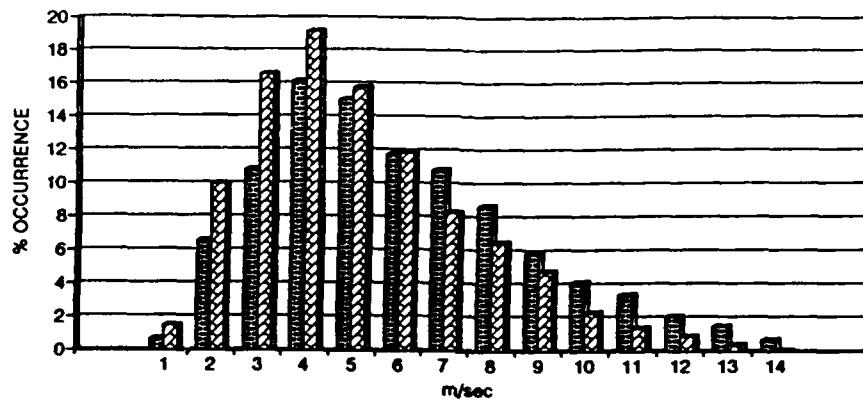
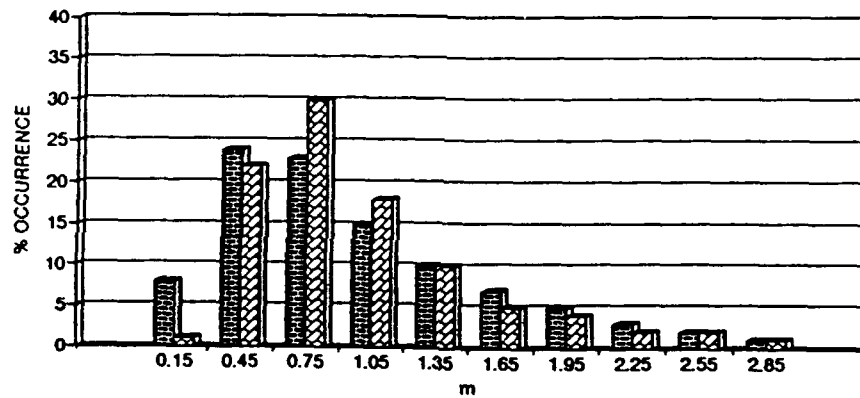


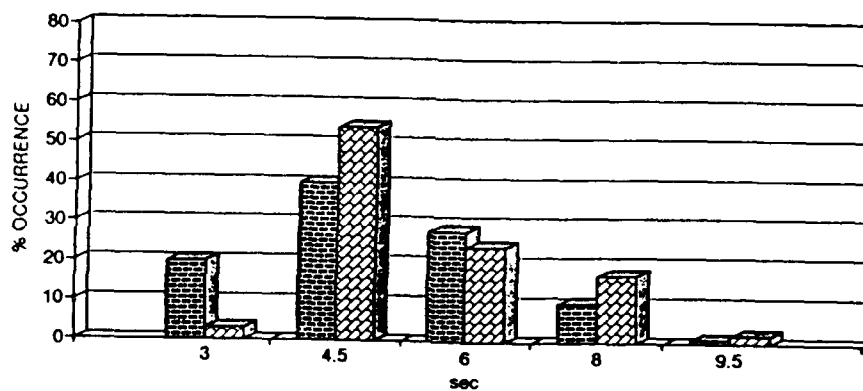
Figure 9. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 92



a. Wind speed



b. Wave height



c. Peak period

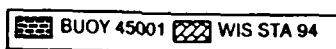
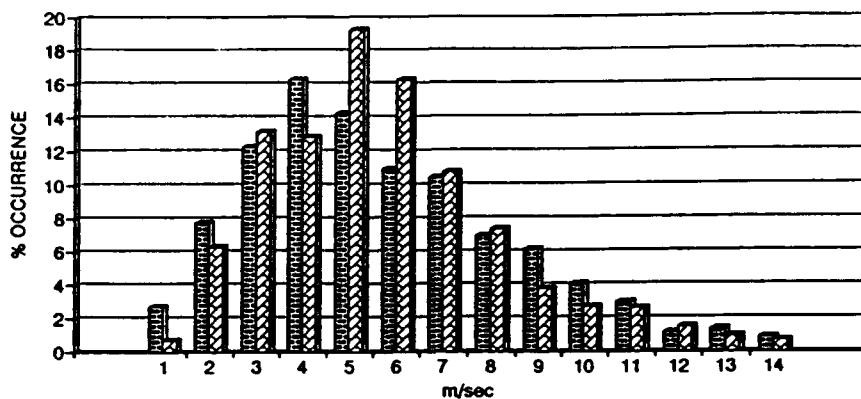
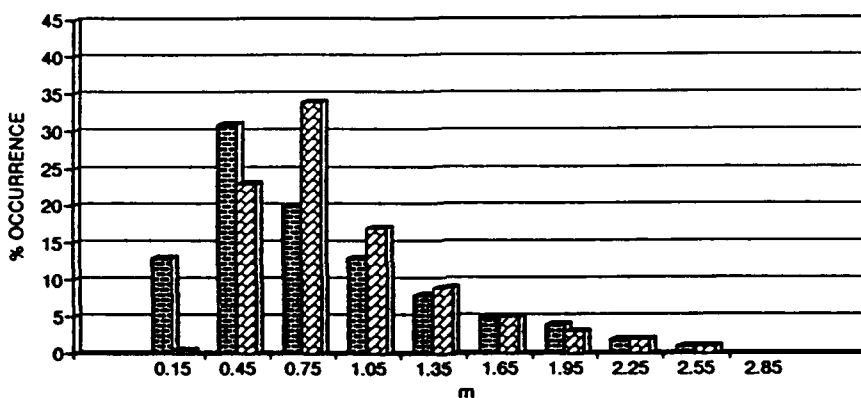


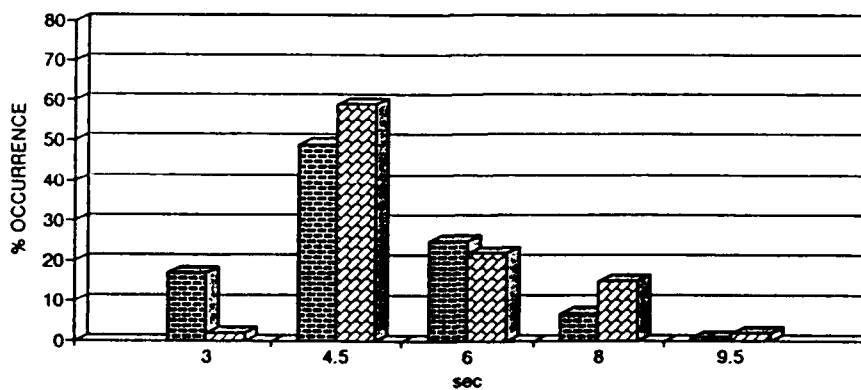
Figure 10. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 94



a. Wind speed



b. Wave height



c. Peak period

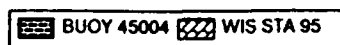
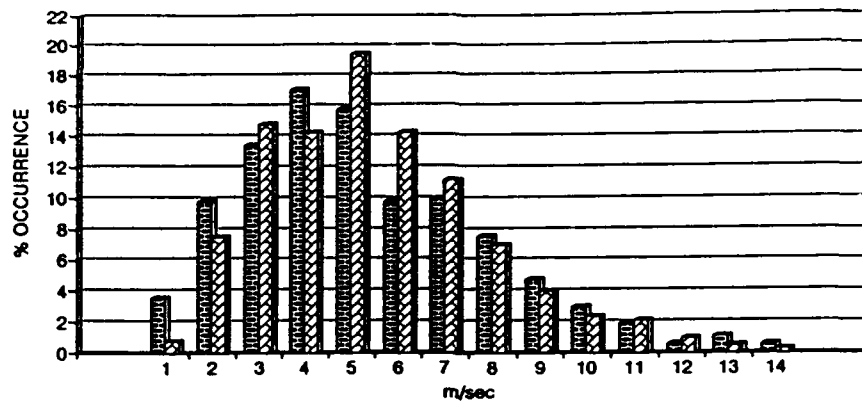
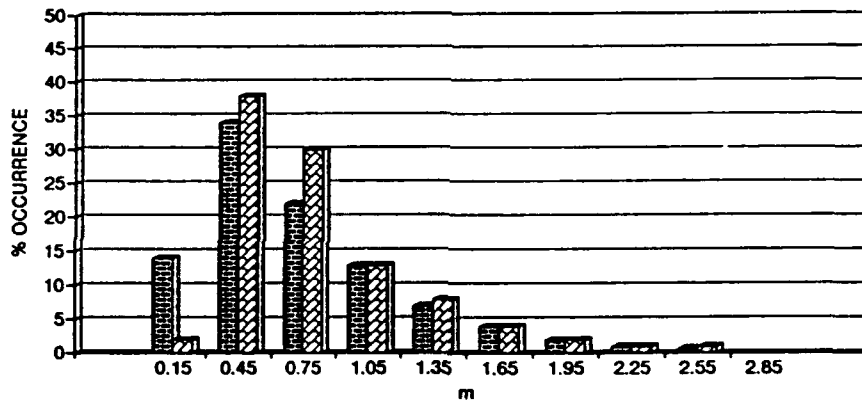


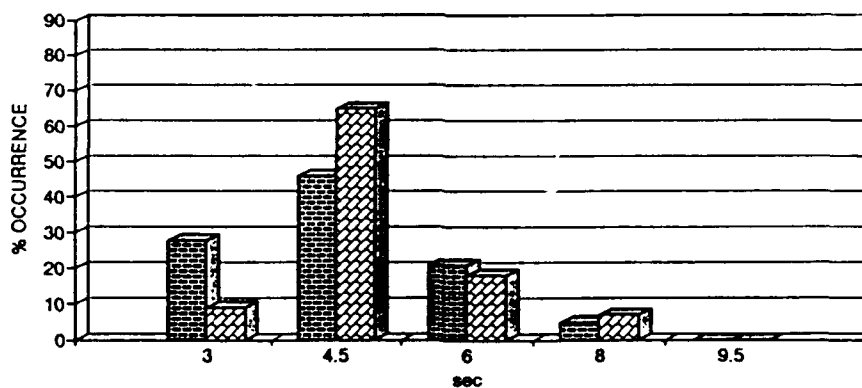
Figure 11. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 95



a. Wind speed



b. Wave height



c. Peak period

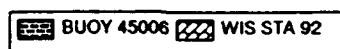


Figure 12. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 92

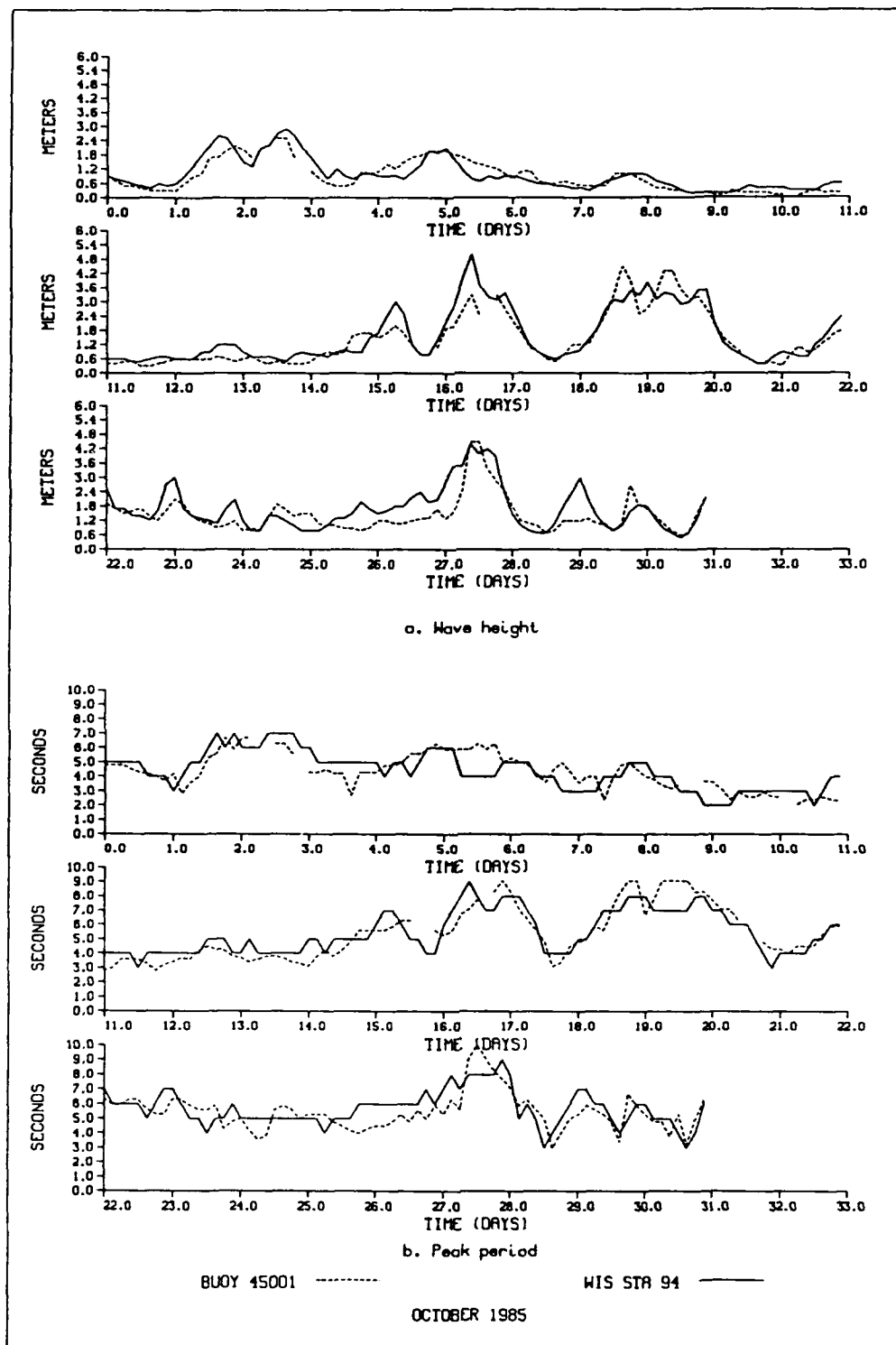


Figure 13. Time series comparison plots of measured versus modeled wave heights and peak periods for October 1985

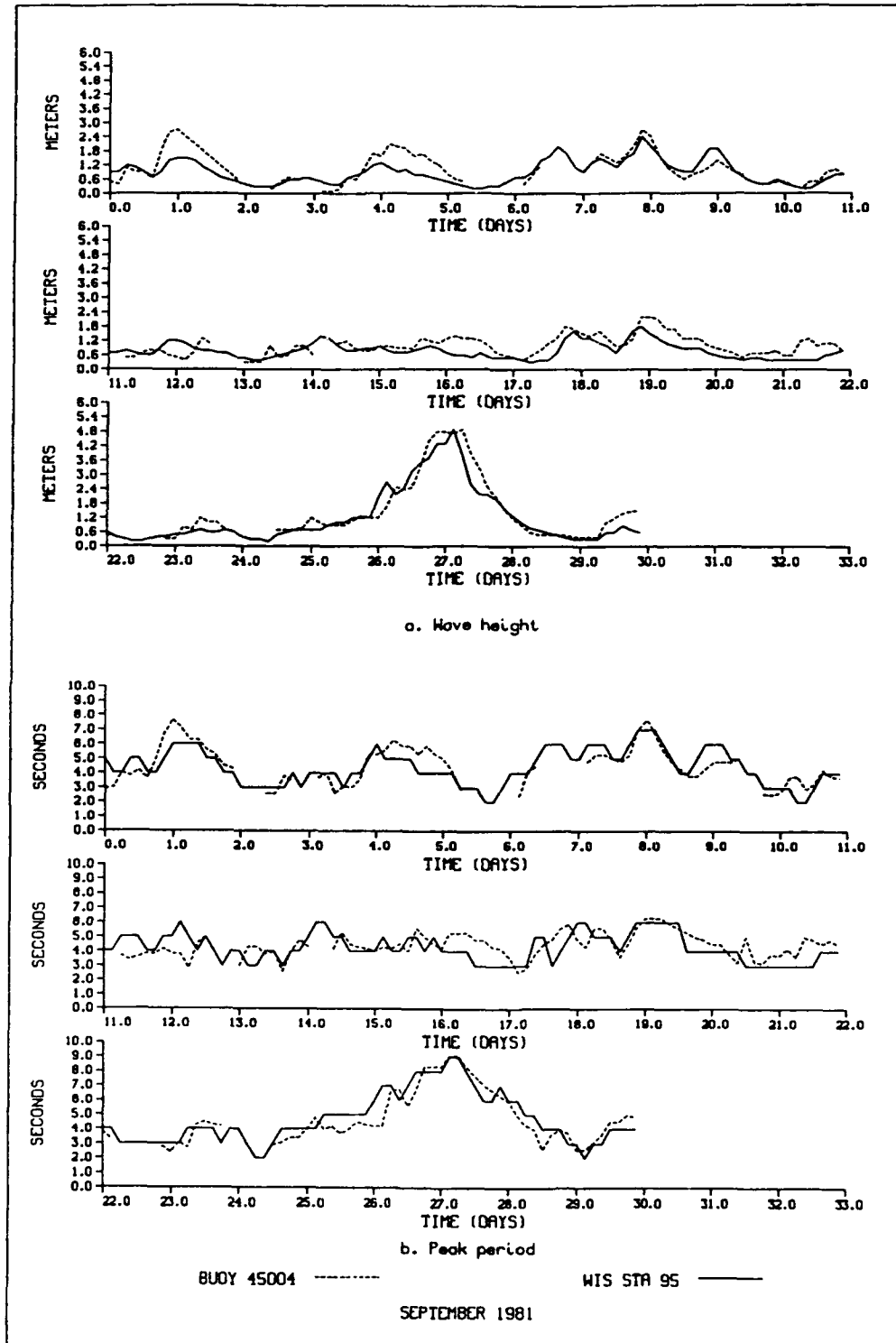


Figure 14. Time series comparison plots of measured versus modeled wave heights and peak periods for September 1981

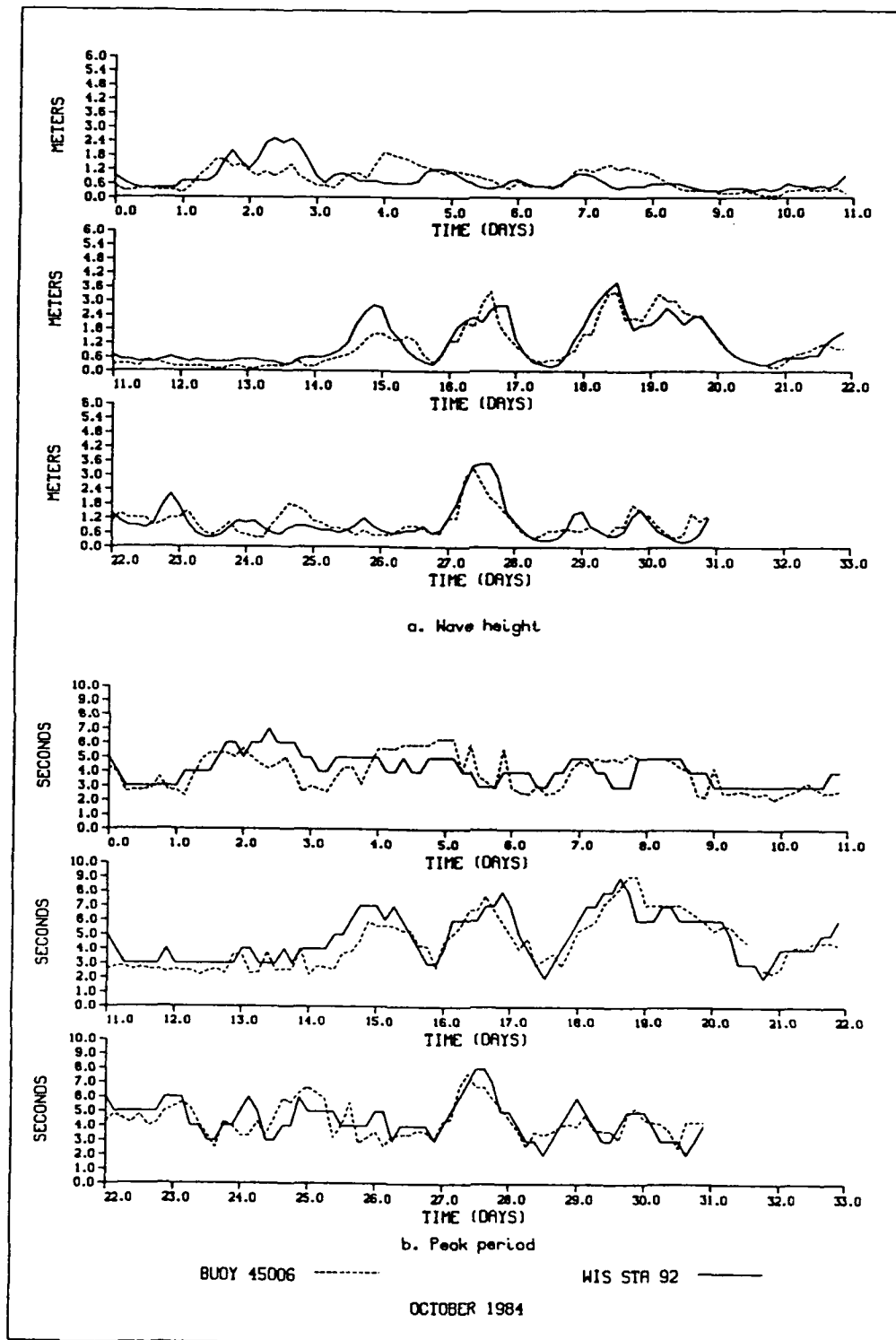
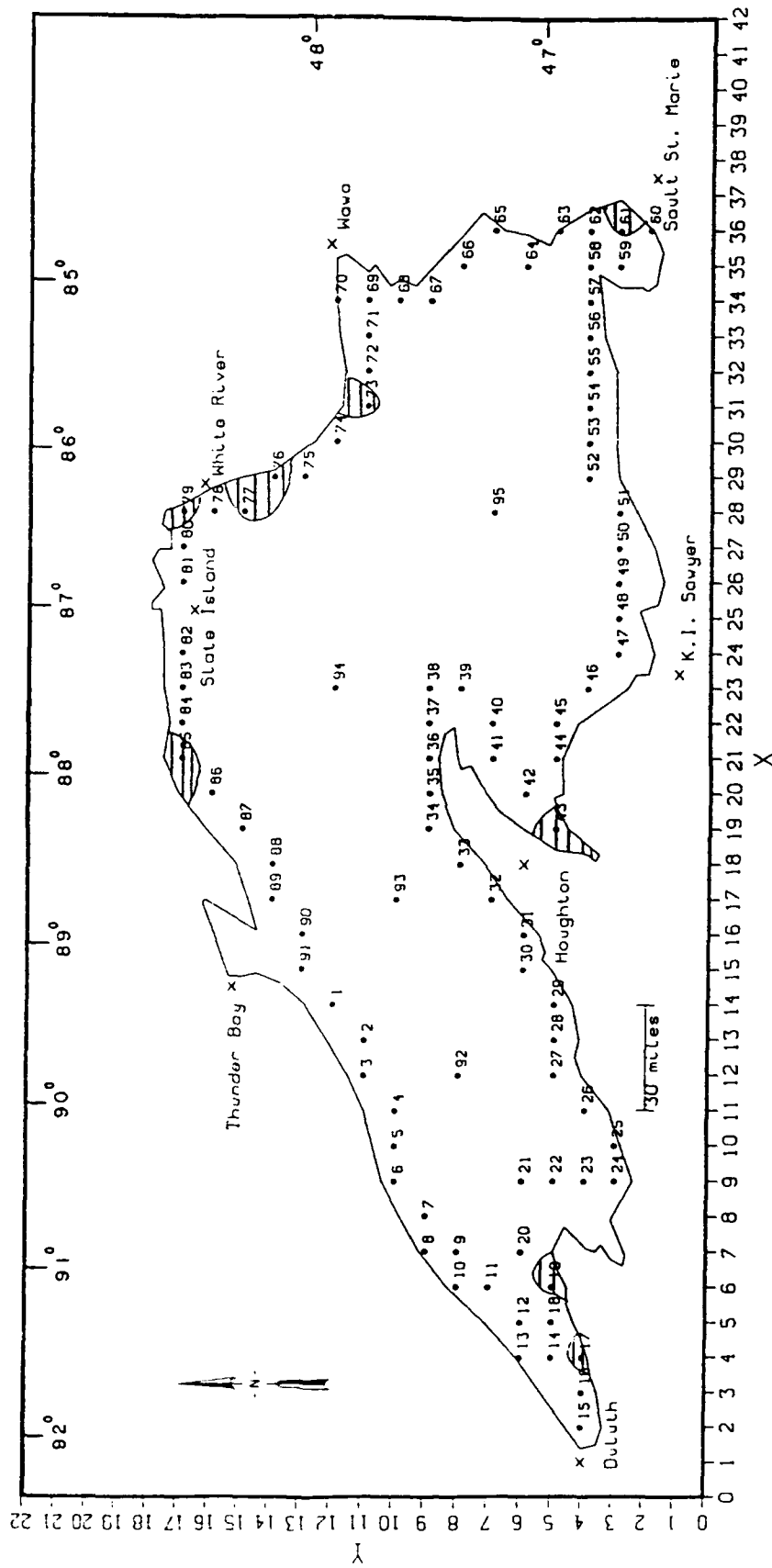
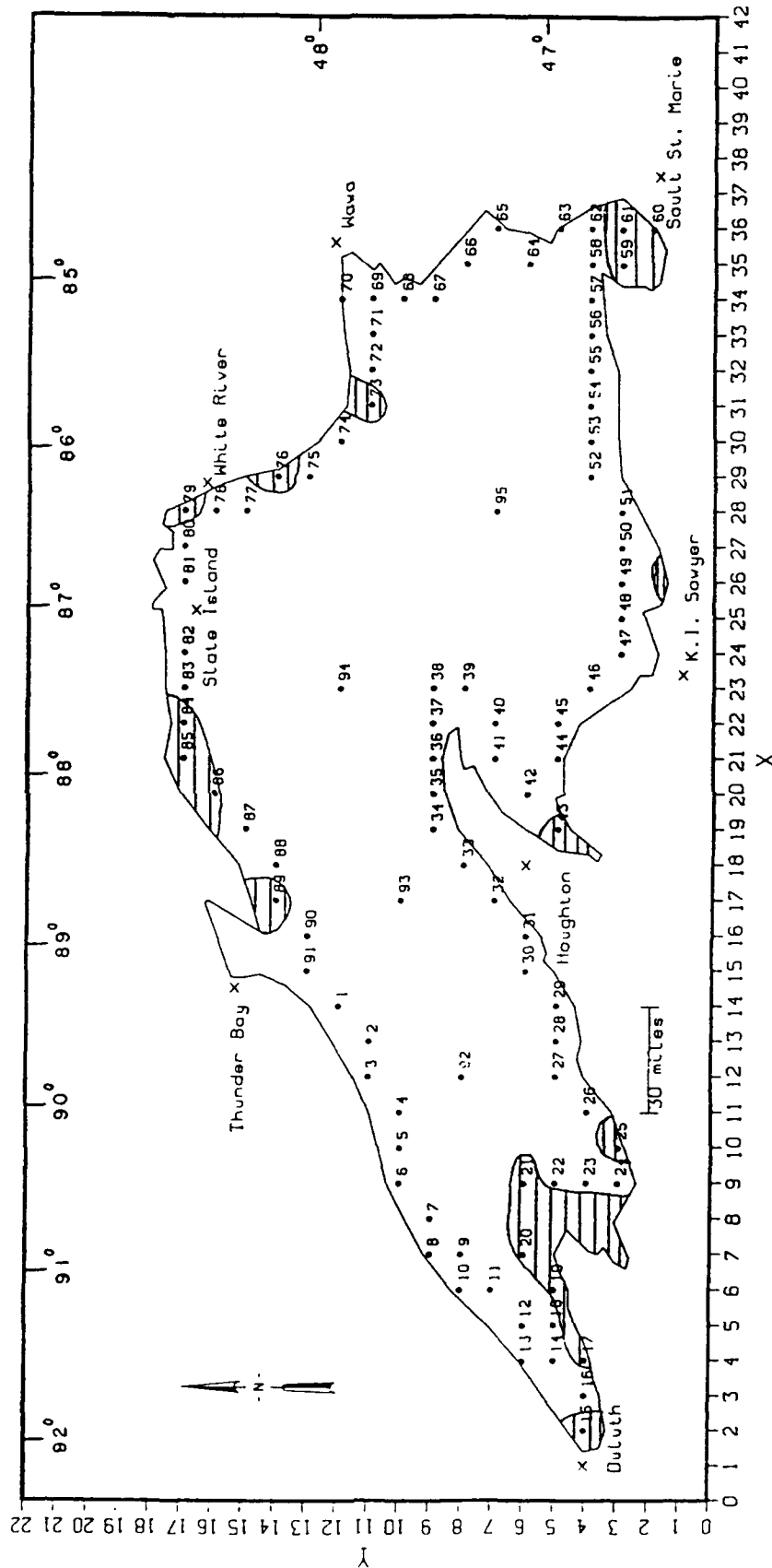


Figure 15. Time series comparison plots of measured versus modeled wave heights and peak periods for October 1984



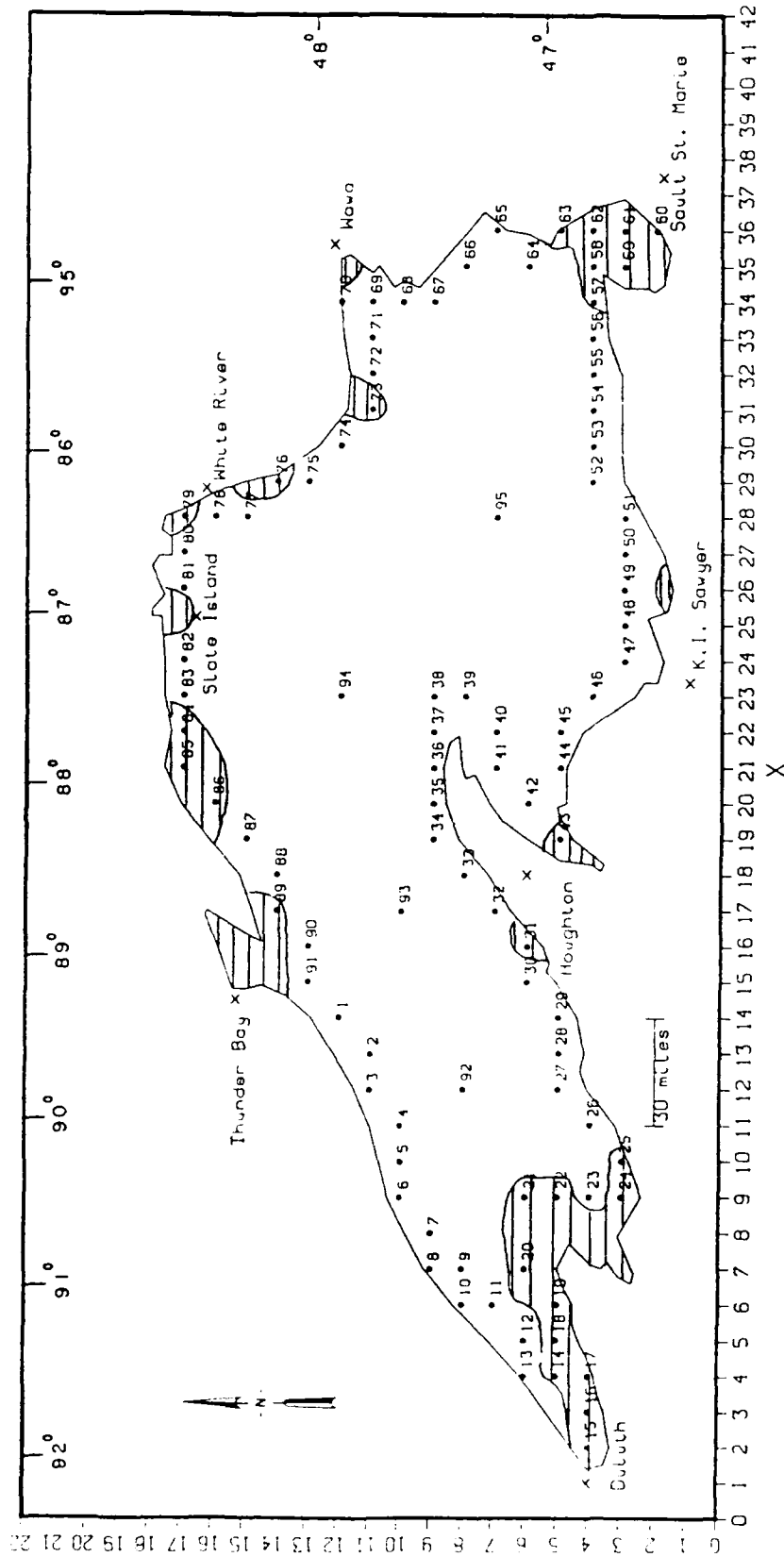
a. 16-31 December

Figure 16. Ice-cover (shaded region) development and decay on Lake Superior for nine half-month periods (Sheet 1 of 9)



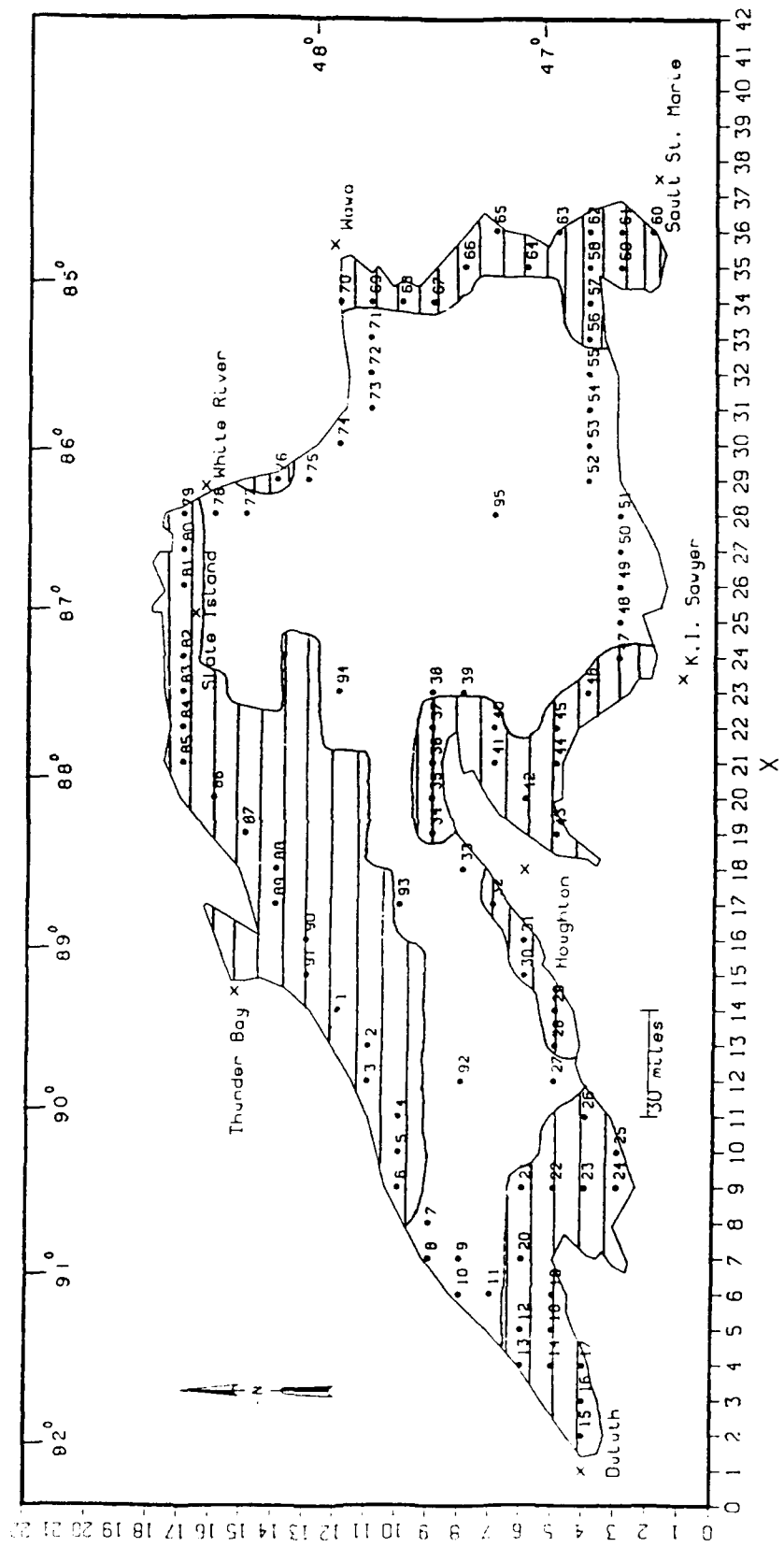
b. 1-15 January

Figure 16. (Sheet 2 of 9)



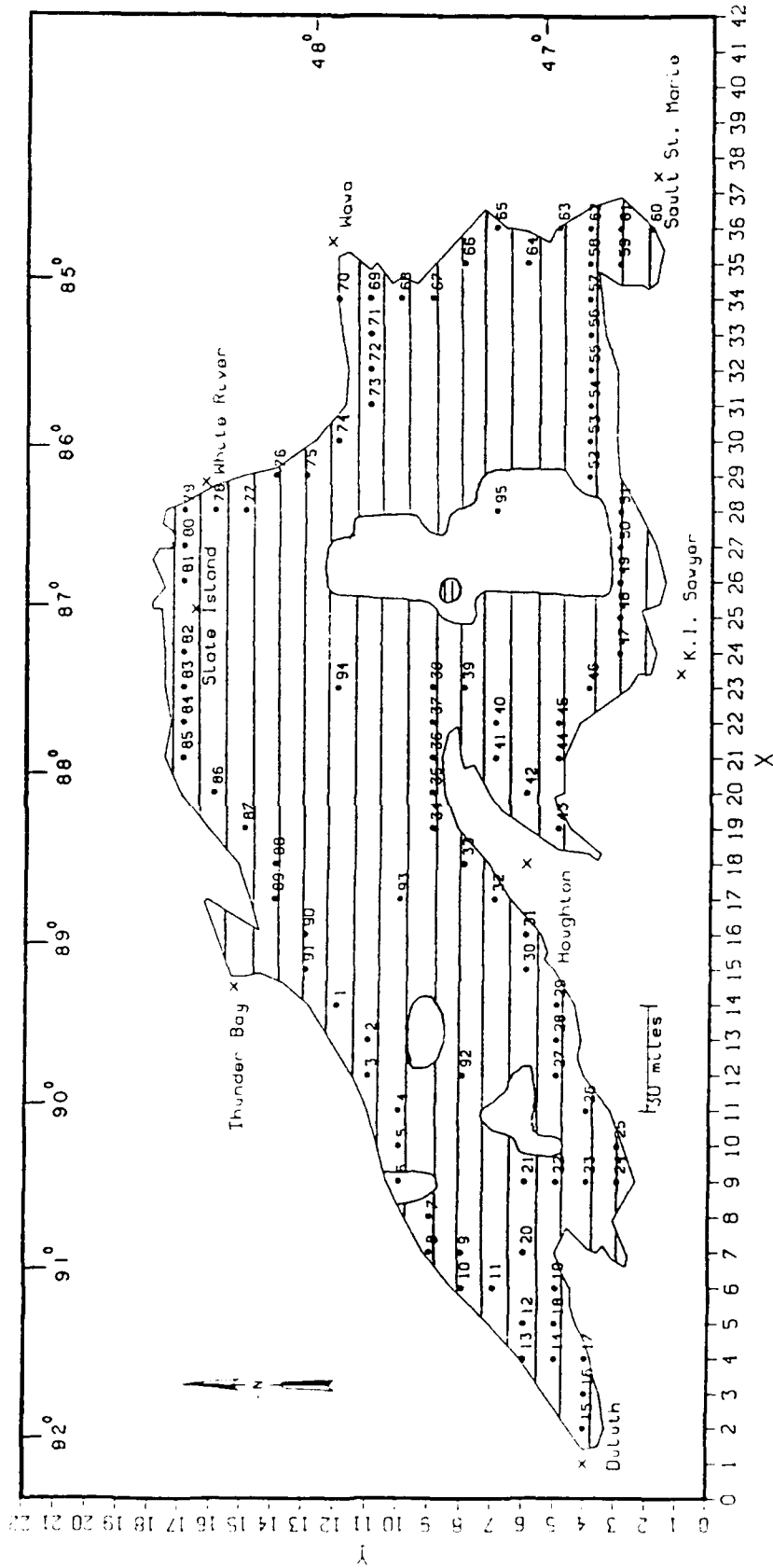
c. 16-31 January

Figure 16. (Sheet 3 of 9)



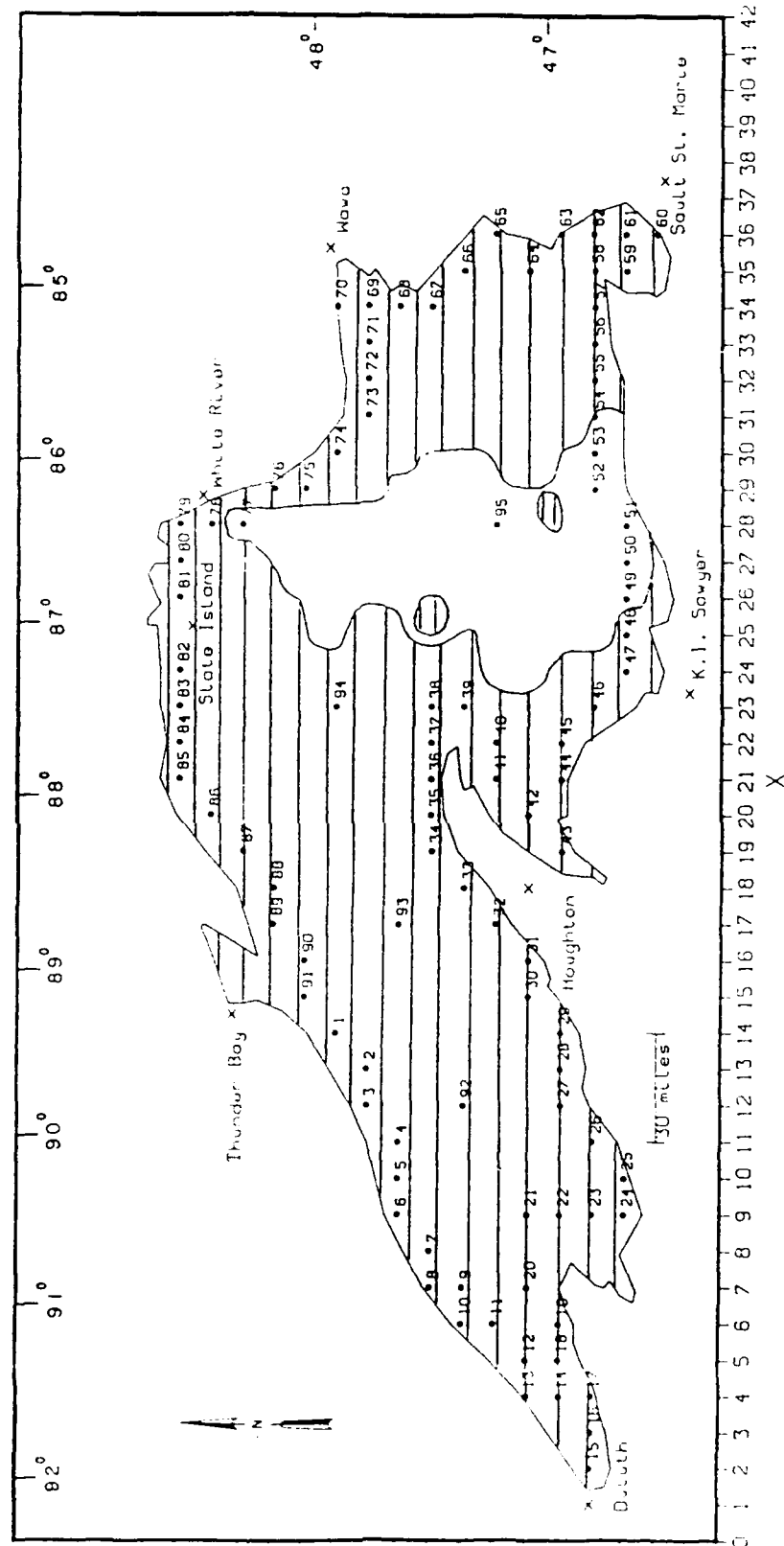
d. 1-15 February

Figure 16. (Sheet 4 of 9)



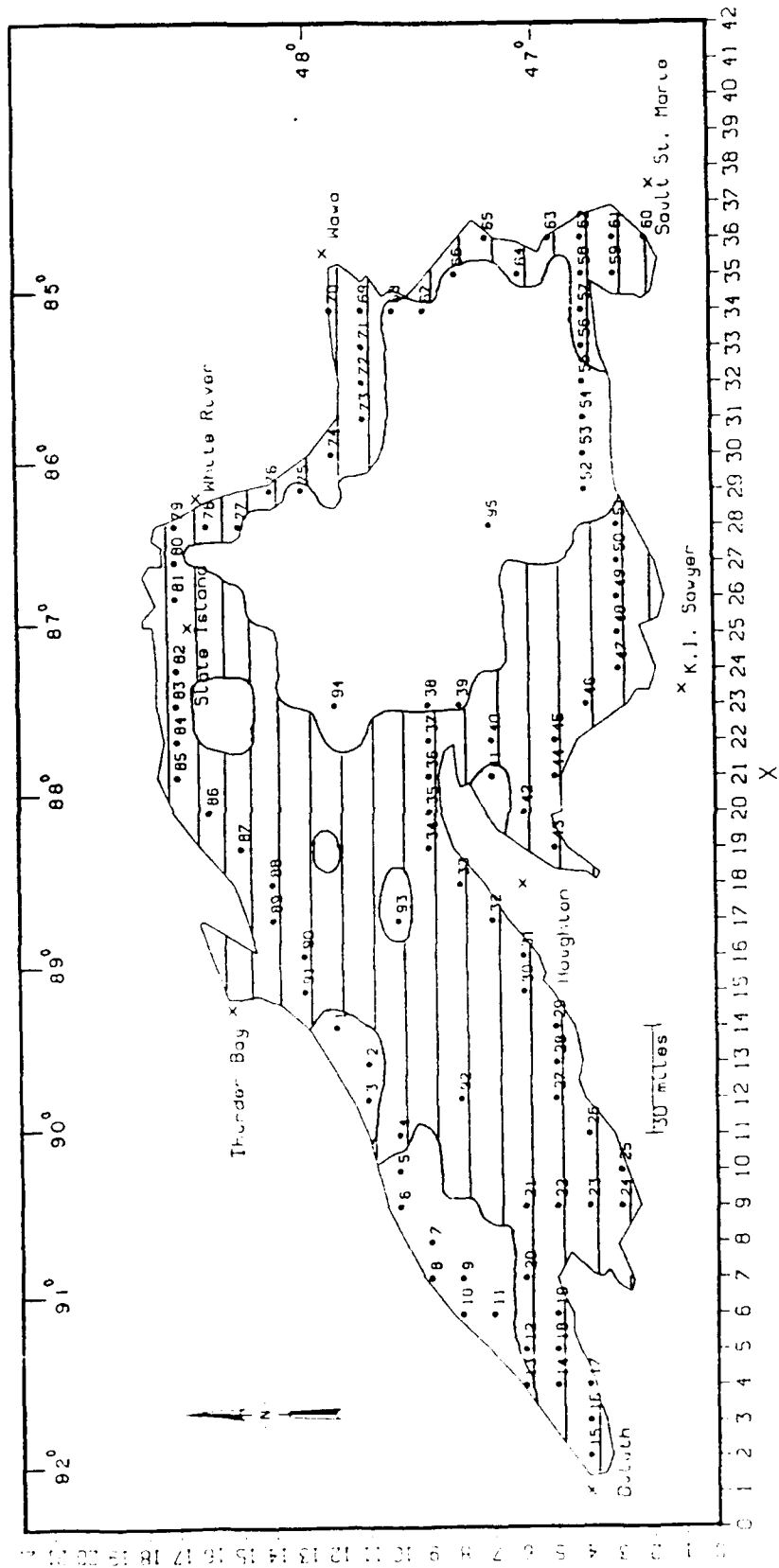
e. 16-28 February

Figure 16. (Sheet 5 of 9)



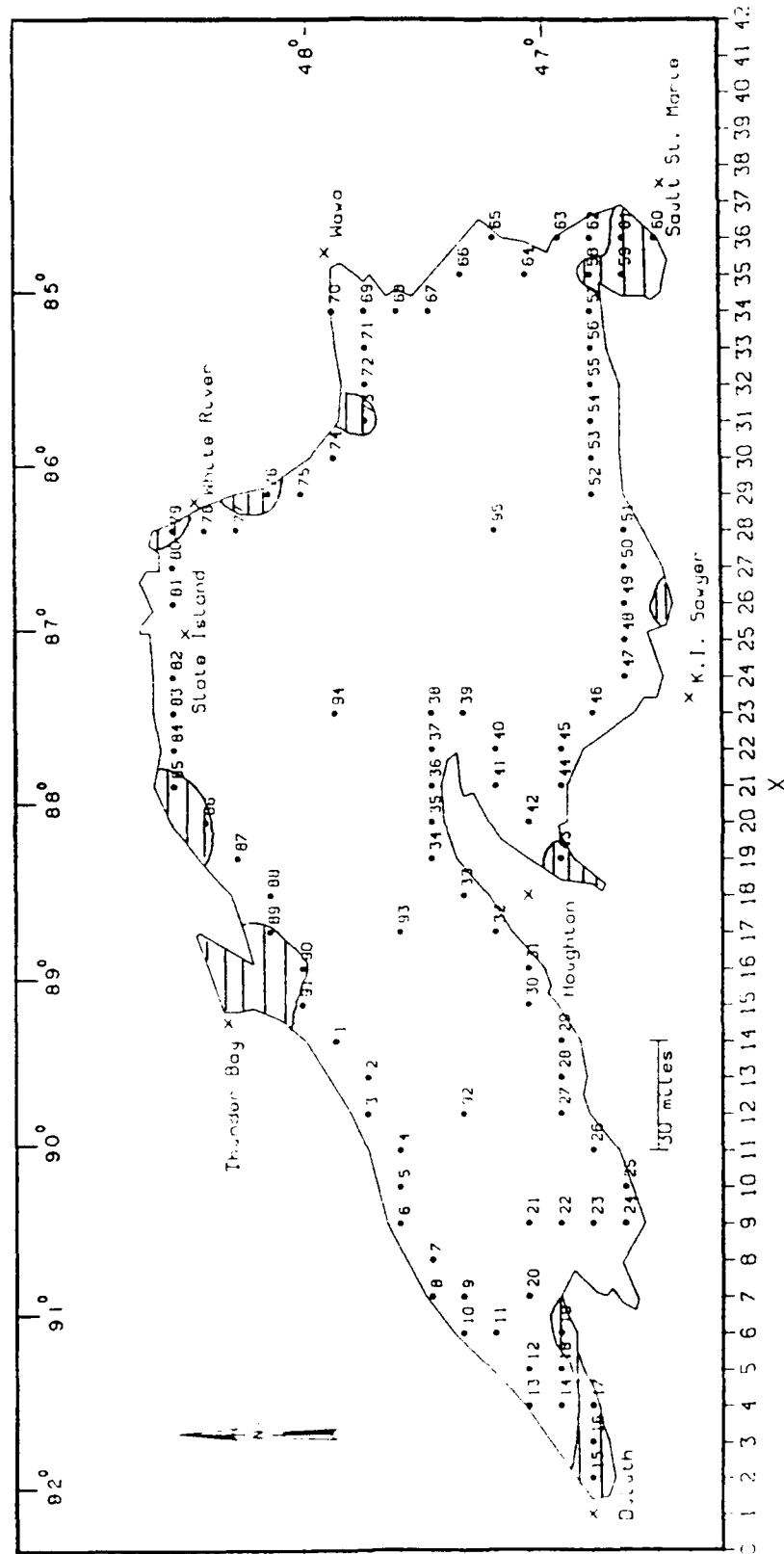
f. 1-15 March

Figure 16. (Sheet 6 of 9)



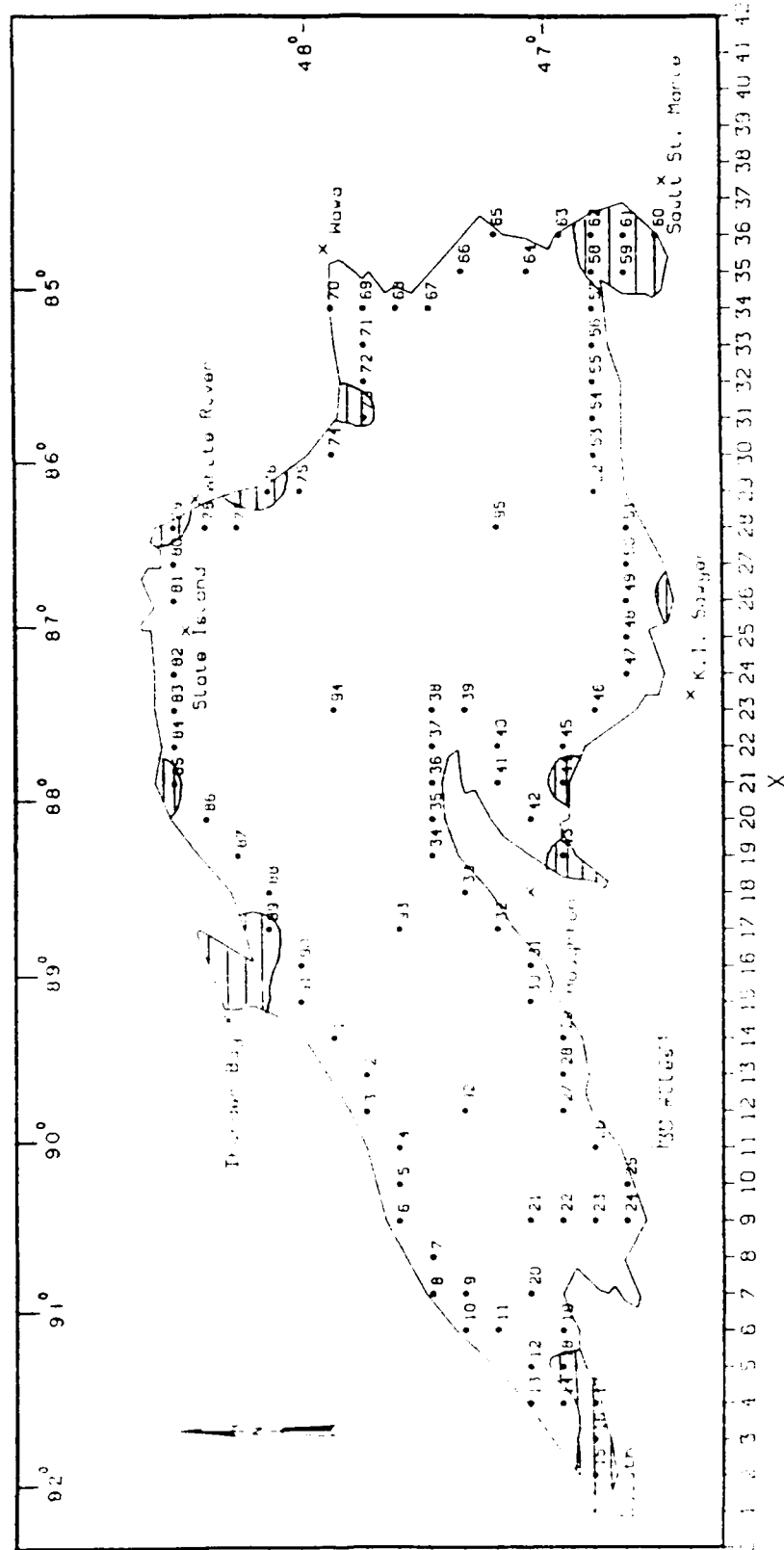
g. 16-31 March

Figure 16. (Sheet 7 of 9)



h. 1-15 April

Figure 16. (Sheet 8 of 9)



i. 16-30 April

Figure 16. (Sheet 9 of 9)

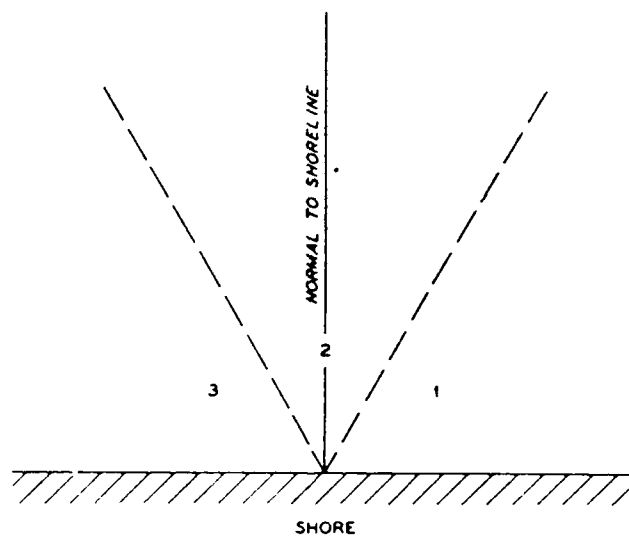
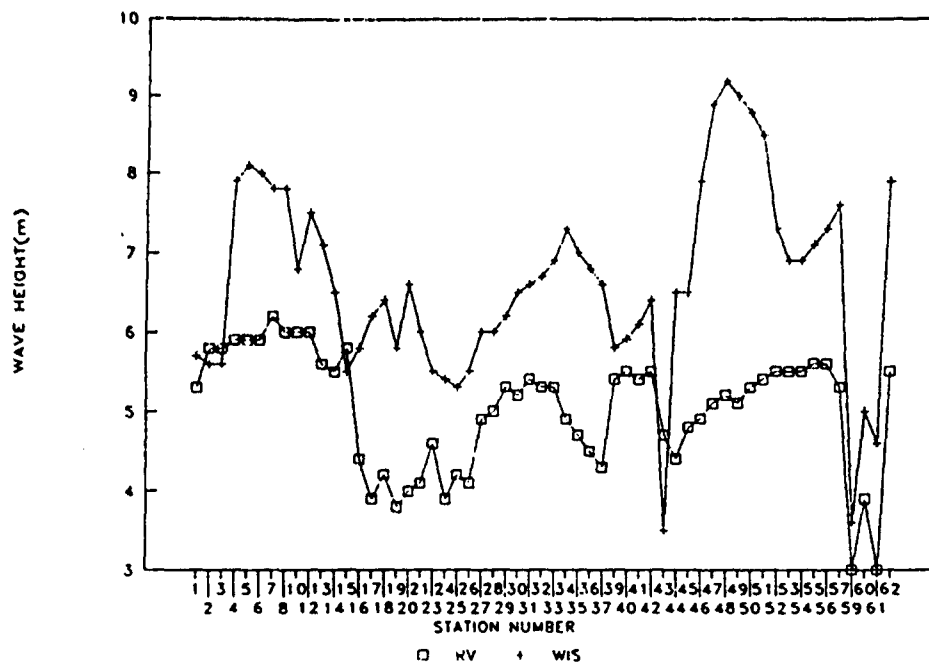
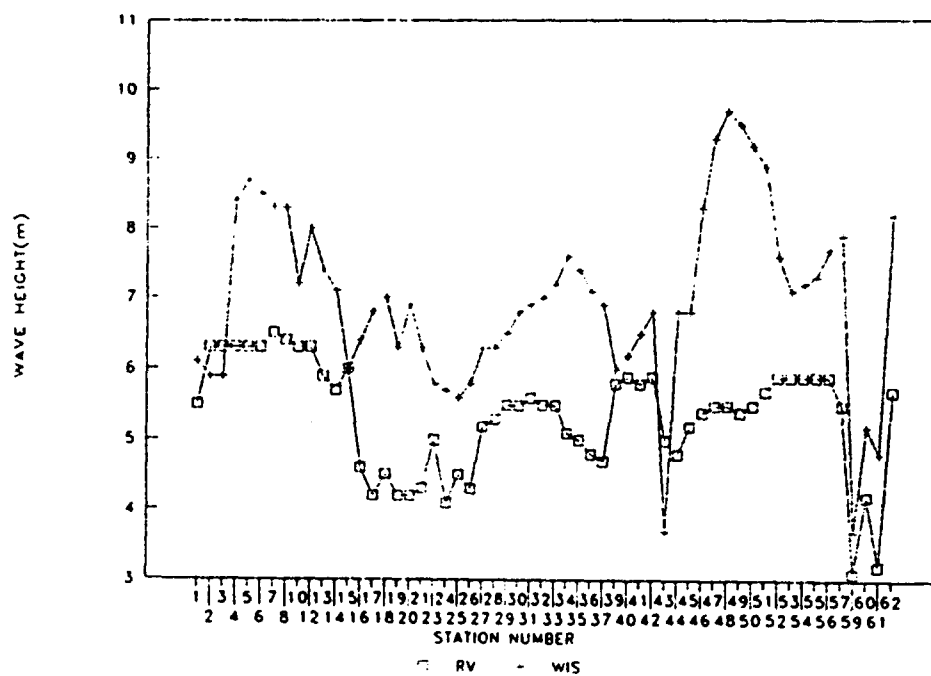


Figure 17. Definition sketch
of angle classes

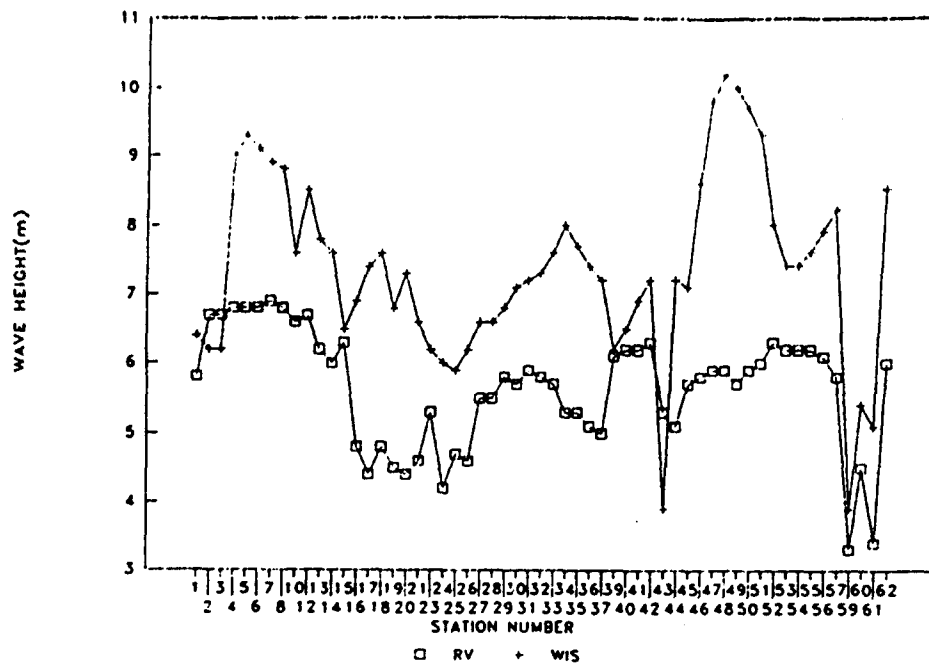


a. 5-year return period

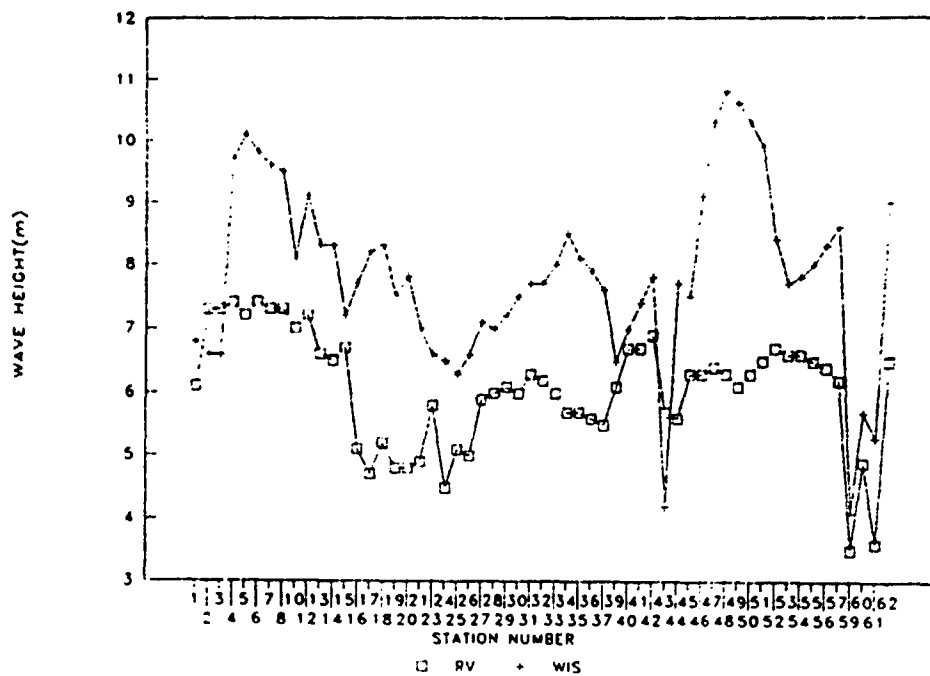


b. 10-year return period

Figure 18. Wave heights for colocated RV and WIS stations for 5-, 10-, 20-, and 50-year return periods (Continued)



c. 20-year return period



d. 50-year return period

Figure 18. (Concluded)

APPENDIX A: SUMMARY TABLES

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	337	742	10	1	.	.	.	.	.	.	1090
0.50-0.99	.	1478	202	7	1	.	.	.	.	.	1688
1.00-1.49	.	.	709	5	.	.	.	.	.	.	714
1.50-1.99	.	.	160	.	.	.	.	.	.	.	160
2.00-2.49	.	.	3	16	.	.	.	.	.	.	19
2.50-2.99	.	.	.	3	1	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	337	2220	1084	32	2	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 3440.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	399	776	17	1	.	.	.	.	.	.	1193
0.50-0.99	.	1074	495	12	2	.	.	.	.	.	1583
1.00-1.49	.	.	525	86	2	.	.	.	.	.	613
1.50-1.99	.	.	98	190	10	.	.	.	.	.	298
2.00-2.49	.	.	2	83	21	.	.	.	.	.	106
2.50-2.99	.	.	.	8	43	6	.	.	.	.	57
3.00-3.49	7	18	.	.	.	.	25
3.50-3.99	2	5	.	.	.	.	7
4.00-4.49	2	1	.	.	.	3
4.50-4.99	0
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	399	1850	1137	380	87	31	1	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3643.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	567	890	20	1	.	.	.	.	.	.	1478
0.50-0.99	.	1075	566	1	.	.	.	.	.	.	1642
1.00-1.49	.	.	353	48	.	.	.	.	.	.	401
1.50-1.99	.	.	39	128	.	.	.	.	.	.	167
2.00-2.49	.	.	.	62	27	.	.	.	.	.	89
2.50-2.99	.	.	.	2	62	2	.	.	.	.	66
3.00-3.49	5	27	.	.	.	.	32
3.50-3.99	9	.	.	.	.	9
4.00-4.49	3	2	.	.	.	5
4.50-4.99	1	.	1	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	567	1965	978	242	94	42	2	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3647.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	632	1378	42	10	.	.	.	.	.	.	2062
0.50-0.99	.	1952	483	5	3	1	.	.	.	.	2444
1.00-1.49	.	.	685	26	1	.	.	.	.	.	712
1.50-1.99	.	.	137	64	7	1	.	.	.	.	209
2.00-2.49	.	.	11	57	12	.	.	.	.	.	80
2.50-2.99	.	.	.	9	24	3	.	.	.	.	36
3.00-3.49	6	8	.	.	.	.	14
3.50-3.99	11	3	.	.	.	14
4.00-4.49	2	3	.	.	.	7
4.50-4.99	1	2	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	632	3330	1358	171	53	26	7	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 5231.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	909	2396	78	11	1	1					3396
0.50-0.99		3783	273	4	7		1				4068
1.00-1.49			696	8							704
1.50-1.99			155		1						156
2.00-2.49			12	12				1			25
2.50-2.99				4							4
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	909	6179	1214	40	9	1	1	1	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7818.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	353	756	10	3	1						1123
0.50-0.99		1288	125								1413
1.00-1.49			204	1	1						206
1.50-1.99			69	7							76
2.00-2.49			1	9							10
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	353	2044	409	21	2	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2650.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	206	447	129	27	1	1					811
0.50-0.99		894	139	44	17	4					1098
1.00-1.49			125	20	6	2					153
1.50-1.99			35	2	5	1	1				44
2.00-2.49			1	4	1	3	3				12
2.50-2.99						1					5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	206	1341	429	101	30	12	4	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 1991.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	313	881	299	5							1498
0.50-0.99		1218	653	152	3						2026
1.00-1.49			162	116	26	1					305
1.50-1.99			32	43	33	3		1			112
2.00-2.49				6	23	11	2	1			43
2.50-2.99					5	6					12
3.00-3.49						2					2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	313	2099	1146	322	90	23	3	2	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 2.6 NO. OF CASES= 3747.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	367	893	379	4	.	.	.	.	.	.	1643
0.50-0.99	.	849	1774	151	.	.	.	.	.	.	2774
1.00-1.49	.	.	500	269	17	.	.	.	.	.	786
1.50-1.99	.	.	52	179	56	5	.	.	.	.	292
2.00-2.49	.	.	.	57	34	10	.	.	.	.	101
2.50-2.99	.	.	.	6	38	13	.	.	.	.	57
3.00-3.49	3	17	1	.	.	.	21
3.50-3.99	5	.	.	.	.	5
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	367	1742	2705	666	148	51	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 5321.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	467	1029	478	11	.	.	.	.	.	.	1985
0.50-0.99	.	922	2022	288	18	1	.	.	.	.	3251
1.00-1.49	.	.	597	327	59	2	.	.	.	.	985
1.50-1.99	.	.	70	244	68	14	.	.	.	.	396
2.00-2.49	.	.	.	119	40	12	.	.	.	.	171
2.50-2.99	.	.	.	5	62	6	.	.	.	.	73
3.00-3.49	8	41	1	.	.	.	50
3.50-3.99	24	.	.	.	.	24
4.00-4.49	1	5	1	.	.	7
4.50-4.99	3	1	.	.	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	467	1951	3167	994	255	101	9	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 6509.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1001	2405	882	99	5	.	.	.	.	.	4392
0.50-0.99	.	3261	3424	773	140	6	.	.	.	.	7604
1.00-1.49	.	.	1299	539	410	69	.	.	.	.	2318
1.50-1.99	.	.	177	352	143	140	6	.	.	.	818
2.00-2.49	.	.	4	159	84	60	7	2	.	.	315
2.50-2.99	.	.	.	2	119	37	6	1	1	.	166
3.00-3.49	12	93	5	.	.	.	110
3.50-3.99	37	20	1	.	.	58
4.00-4.49	3	32	7	1	.	43
4.50-4.99	1	8	13	.	.	22
5.00-5.49	1	6	3	.	10
5.50-5.99	5	8	.	13
6.00-6.49	2	.	2
6.50-6.99	1	.	1
7.00+	0
TOTAL	1001	5666	5786	1923	913	446	86	35	16	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 14858.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1515	3599	134	27	.	.	.	.	.	.	5275
0.50-0.99	.	4517	788	119	85	2	.	.	.	.	5511
1.00-1.49	.	.	1544	66	54	23	.	.	.	.	1687
1.50-1.99	.	.	727	81	35	71	1	.	.	.	915
2.00-2.49	.	.	79	48	19	12	7	.	.	.	165
2.50-2.99	.	.	.	10	19	6	1	3	.	.	39
3.00-3.49	.	.	.	2	2	20	2	1	.	.	27
3.50-3.99	3	2	.	1	.	6
4.00-4.49	2	4	2	.	.	8
4.50-4.99	2	.	.	.	4
5.00-5.49	1	.	1
5.50-5.99	3	.	3
6.00-6.49	3	.	3
6.50-6.99	0
7.00+	0
TOTAL	1515	8116	3272	353	214	139	19	8	8	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 12771.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1034	1805	6	1	.	.	.	.	.	.	2846
0.50-0.99	.	2399	376	.	.	.	.	.	.	.	2775
1.00-1.49	.	.	1228	1	.	.	.	.	.	.	1228
1.50-1.99	.	.	655	1	.	2	.	.	.	.	658
2.00-2.49	.	.	101	96	1	1	1	.	.	.	200
2.50-2.99	.	.	.	25	.	.	.	.	.	.	26
3.00-3.49	.	.	.	5	.	.	.	.	.	.	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1034	4204	2366	128	1	3	2	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 7241.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	482	991	6	.	.	.	.	.	.	.	1479
0.50-0.99	.	1821	551	.	.	.	.	.	.	.	2372
1.00-1.49	.	.	909	.	.	.	.	.	.	.	909
1.50-1.99	.	.	716	86	.	.	.	.	.	.	802
2.00-2.49	.	.	16	167	.	.	.	.	.	.	183
2.50-2.99	.	.	.	28	.	.	.	.	.	.	28
3.00-3.49	.	.	.	4	.	.	.	.	.	.	8
3.50-3.99	4	.	.	.	.	.	1
4.00-4.49	1	.	.	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	482	2812	2198	285	5	0	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 5412.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	314	587	5	4	.	1	.	.	.	.	911
0.50-0.99	.	1750	840	4	.	.	.	.	.	.	2594
1.00-1.49	.	.	975	.	.	.	.	.	.	.	975
1.50-1.99	.	.	927	182	.	.	.	.	.	.	1109
2.00-2.49	.	.	.	209	.	.	.	.	.	.	209
2.50-2.99	.	.	.	47	.	.	.	.	.	.	47
3.00-3.49	.	.	.	1	9	.	.	.	.	.	10
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	314	2337	2747	447	11	1	0	0	0	0	0

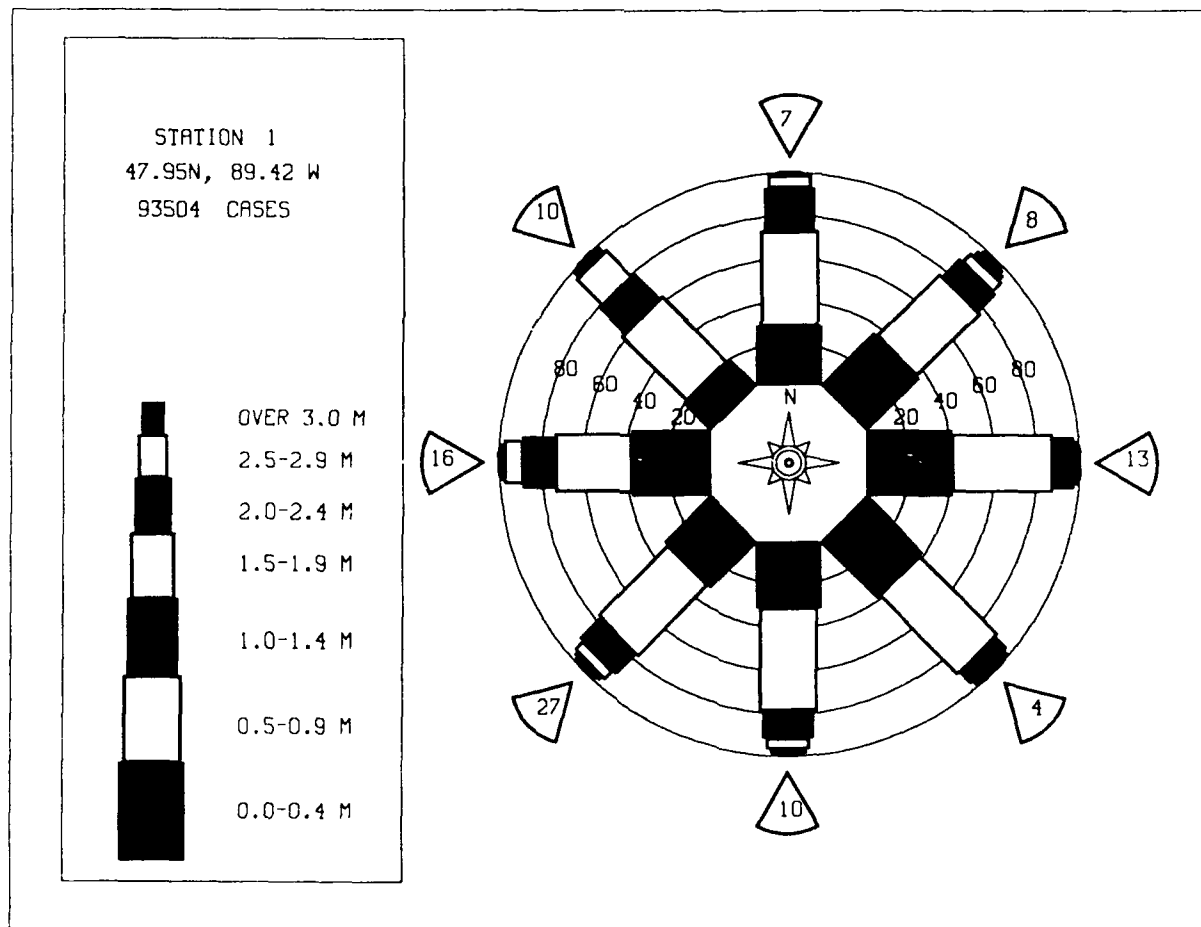
MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5482.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	199	527	11	1	.	.	.	.	.	.	738
0.50-0.99	.	1412	392	1	.	.	.	.	.	.	1805
1.00-1.49	.	.	881	1	.	.	.	.	.	.	882
1.50-1.99	.	.	432	58	.	.	.	.	.	.	490
2.00-2.49	.	.	5	65	.	.	.	.	.	.	70
2.50-2.99	.	.	.	12	.	.	.	.	.	.	12
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	199	1939	1721	138	0	0	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3743.

STATION S01 47.95N 89.42W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	910	2010	251	21	27	1	.	.	.	.	3192
0.50-0.99	.	2970	1310	156	27	9	.	.	.	.	4464
1.00-1.49	.	.	1139	151	57	.	.	.	.	.	1356
1.50-1.99	.	.	448	162	36	23	.	.	.	.	669
2.00-2.49	.	.	23	117	26	11	2	.	.	.	179
2.50-2.99	.	.	.	17	37	8	.	.	.	.	62
3.00-3.49	.	.	.	1	5	22	.	.	.	.	28
3.50-3.99	9	.	.	.	.	11
4.00-4.49	1	.	.	.	.	6
4.50-4.99	1	2	.	.	3
5.00-5.49	0
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	910	4980	3171	625	188	84	9	3	1	0	
MEAN HS(M)= 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.											



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S01 (47.95N 89.42W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.0	1.0	0.8	0.7	0.5	0.5	0.5	0.6	0.9	1.0	0.9	0.8
1957	0.9	0.9	0.7	0.7	0.7	0.6	0.5	0.5	0.7	0.7	1.1	1.0	0.8
1958	0.7	0.9	0.6	0.8	0.7	0.6	0.5	0.6	0.8	0.7	1.1	0.9	0.8
1959	0.9	0.9	0.9	0.7	0.8	0.5	0.6	0.5	0.9	0.8	1.0	0.9	0.8
1960	0.8	0.8	0.7	0.8	0.6	0.5	0.5	0.5	0.6	0.8	1.0	1.0	0.7
1961	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.7	0.8	0.9	0.9	0.7
1962	1.1	0.8	0.7	0.7	0.6	0.4	0.5	0.5	0.7	0.8	1.0	1.0	0.7
1963	1.0	1.0	0.8	0.6	0.6	0.5	0.5	0.5	0.7	0.7	0.9	1.1	0.7
1964	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.7	0.8	0.8	0.7
1965	1.1	1.1	0.8	0.7	0.6	0.5	0.5	0.4	0.6	0.9	1.3	1.3	0.8
1966	1.2	1.3	1.4	1.0	1.1	0.8	0.8	0.7	1.0	1.3	1.1	1.3	1.1
1967	1.3	1.2	1.3	1.1	0.9	0.8	0.8	0.8	0.9	1.3	1.2	1.3	1.1
1968	1.2	1.4	1.2	1.1	0.9	0.8	0.9	0.8	0.9	1.1	1.3	1.4	1.1
1969	1.2	0.8	0.9	0.7	0.7	0.6	0.5	0.7	0.7	0.8	0.9	0.8	0.8
1970	0.8	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.7	0.8	0.9	0.8	0.7
1971	0.9	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0.7	0.9	0.9	0.8	0.7
1972	1.0	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.8	0.9	0.7	0.9	0.7
1973	0.9	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.7	0.8	1.0	0.8	0.7
1974	0.9	0.7	0.8	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.9	0.8	0.7
1975	1.1	1.0	0.9	0.5	0.5	0.5	0.5	0.6	0.7	0.9	0.9	0.8	0.7
1976	0.8	0.9	1.0	0.6	0.6	0.5	0.4	0.5	0.6	0.7	0.9	0.8	0.7
1977	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.7
1978	0.8	0.6	0.7	0.6	0.5	0.5	0.4	0.5	0.7	0.8	0.8	0.8	0.6
1979	0.7	0.7	0.7	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.8	0.8	0.6
1980	0.8	0.6	0.7	0.6	0.5	0.5	0.4	0.5	0.8	0.8	0.6	0.6	0.6
1981	0.8	0.6	0.9	0.7	0.5	0.5	0.4	0.4	0.7	0.7	0.8	0.7	0.7
1982	1.1	0.8	0.9	0.8	0.6	0.5	0.5	0.5	0.6	0.8	0.9	1.1	0.7
1983	0.9	0.8	0.9	0.6	0.6	0.5	0.5	0.4	0.7	0.7	1.3	1.1	0.8
1984	1.0	0.9	0.8	0.8	0.6	0.6	0.5	0.5	0.7	0.9	1.1	1.0	0.8
1985	1.0	0.9	0.7	0.7	0.6	0.6	0.4	0.5	0.8	0.9	0.8	0.8	0.7
1986	1.0	0.7	0.9	0.7	0.6	0.6	0.4	0.5	0.7	0.8	1.0	0.9	0.7
1987	0.7	0.6	0.7	0.4	0.4	0.3	0.4	0.3	0.4	0.7	0.7	0.7	0.5
MEAN	0.9	0.9	0.9	0.7	0.6	0.5	0.5	0.5	0.7	0.8	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S01 (47.95N 89.42W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.6	2.8	4.7	2.9	2.5	1.3	1.3	1.5	2.2	2.7	3.6	2.6	
1957	3.3	3.7	3.8	2.1	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1958	3.0	3.4	3.3	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1959	3.1	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1960	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1961	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1962	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1963	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1964	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1965	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1966	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1967	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1968	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1969	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1970	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1971	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1972	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1973	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1974	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1975	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1976	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1977	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1978	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1979	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1980	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1981	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1982	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1983	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1984	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1985	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1986	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1987	3.3	3.6	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	

32 YR. STATISTICS FOR WIS STATION S01

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.0
LARGEST WAVE HS (METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	234.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	77112112

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	327	686	47	23	1	1					1085
0.50-0.99		1227	271	17	9	16	5	1			1546
1.00-1.49			528	20	2			1			551
1.50-1.99			139	5	1						145
2.00-2.49			9	8						1	18
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	327	1913	994	74	13	17	5	2	0	1	3135

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3135.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	350	636	52	13	4	2					1057
0.50-0.99		797	453	13	1	8	1	1			1284
1.00-1.49			438	95			1	2	1		542
1.50-1.99			65	193	19	1					278
2.00-2.49			1	70	29	2					102
2.50-2.99				10	40	19					69
3.00-3.49					6	35	1				42
3.50-3.99					1	9	2				12
4.00-4.49						4	1				5
4.50-4.99						2	1	1			4
5.00-5.49											0
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	350	1433	1009	394	115	82	7	4	2	0	3189

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 3189.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	612	814	79	25	4						1534
0.50-0.99		669	644	19	7	7					1346
1.00-1.49			321	77	3	1					402
1.50-1.99			24	145	13				1		183
2.00-2.49				47	33	1					81
2.50-2.99					42	22					64
3.00-3.49					5	40					45
3.50-3.99					1	20	3			1	25
4.00-4.49						1	6				7
4.50-4.99							2	1			3
5.00-5.49							2	1			3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	612	1483	1068	313	108	92	13	2	1	1	3465

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3465.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	486	837	75	21	3	2					1424
0.50-0.99		1241	1034	67	14	20	1				2377
1.00-1.49			576	39	9	17	1	1			643
1.50-1.99			162	130	10	5	2	3	1		313
2.00-2.49				115	20		3	4	3		145
2.50-2.99				26	13	6	2	2	7		57
3.00-3.49				4	6	14	2	2	6	2	34
3.50-3.99					7	5	2		1	2	17
4.00-4.49					1		6			1	8
4.50-4.99						1		1			2
5.00-5.49								2			2
5.50-5.99								1			1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	486	2078	1847	402	83	70	17	16	18	6	4714

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 4714.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	558	932	165	21	6						1682
0.50-0.99		2926	2405	201	36	18					5586
1.00-1.49			1070	80	52	42	9	2			1255
1.50-1.99			313	99	27	43	7	3			493
2.00-2.49			1	130	5	37	20	12	1		210
2.50-2.99				20	1	2	7	25	12	1	68
3.00-3.49				7	5	1	4	11	6	5	39
3.50-3.99					2			1	5	4	12
4.00-4.49										1	3
4.50-4.99									1	1	2
5.00-5.49										3	3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	558	3858	3954	558	136	143	47	54	30	15	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 8763.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	278	484	74	16	1						853
0.50-0.99		1017	1029	58	16	5					2125
1.00-1.49			406	78	10	5	1				500
1.50-1.99			79	91	22	11	3	1			207
2.00-2.49				62	9	17	6	1			95
2.50-2.99				4	22	4	8	4			42
3.00-3.49					2	4	1	2	2		11
3.50-3.99						5	1	2	3	1	12
4.00-4.49						2	2		1		5
4.50-4.99								1			1
5.00-5.49								2			2
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	278	1501	1588	309	82	53	22	13	6	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3615.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	300	551	102	20	4						977
0.50-0.99		499	778	21	4	7	1				1310
1.00-1.49		1	217	101	3	1	1				324
1.50-1.99			21	80	18	2	1				122
2.00-2.49				26	11	2		1			40
2.50-2.99					24	8					32
3.00-3.49					4	14	1	2			21
3.50-3.99						11					11
4.00-4.49						2	3				5
4.50-4.99						1	1	2			4
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	300	1051	1118	248	68	48	8	5	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2673.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	391	1019	129	14	5	1					1559
0.50-0.99		585	1147	27	4	13					1776
1.00-1.49			220	130		3					353
1.50-1.99			18	93	17						128
2.00-2.49				23	17	3					43
2.50-2.99				1	23	4					28
3.00-3.49						12					12
3.50-3.99						3	1				4
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	391	1604	1514	288	66	39	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 3658.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	504	1070	180	17	2	1	.	.	.	.	1774
0.50-0.99	.	553	1295	23	8	6	1	.	.	.	1886
1.00-1.49	.	.	325	195	2	2	.	.	.	.	524
1.50-1.99	.	.	29	143	40	.	.	.	.	.	212
2.00-2.49	.	.	.	57	24	4	.	.	.	.	85
2.50-2.99	.	.	.	2	33	3	.	.	.	.	38
3.00-3.49	2	18	.	.	.	.	20
3.50-3.99	6	1	.	.	.	7
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	504	1623	1829	437	111	40	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4261.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	556	1107	243	29	11	.	.	.	.	.	1946
0.50-0.99	.	607	1678	108	1	4	.	.	.	.	2398
1.00-1.49	.	.	424	279	9	1	.	.	.	.	713
1.50-1.99	.	.	44	217	50	2	.	.	.	.	313
2.00-2.49	.	.	.	69	28	11	.	.	.	.	108
2.50-2.99	.	.	.	3	47	4	.	.	.	.	54
3.00-3.49	3	31	.	.	.	.	34
3.50-3.99	10	.	.	.	.	10
4.00-4.49	1	3	.	.	.	4
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	556	1714	2389	705	149	64	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 5228.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1082	1933	693	57	11	2	.	.	.	.	3778
0.50-0.99	.	1380	3568	537	24	5	.	1	.	.	5515
1.00-1.49	.	.	1037	546	122	3	1	.	.	.	1709
1.50-1.99	.	.	109	370	165	20	1	.	.	.	665
2.00-2.49	.	.	1	156	77	45	.	.	.	.	279
2.50-2.99	.	.	.	4	122	27	1	.	.	.	154
3.00-3.49	9	83	.	1	.	.	93
3.50-3.99	50	4	.	.	.	54
4.00-4.49	9	17	1	.	.	27
4.50-4.99	7	.	1	.	15
5.00-5.49	8	.	.	9
5.50-5.99	3	2	.	5
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1082	3313	5408	1670	530	244	31	21	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 11520.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1575	1992	172	42	16	3	.	.	.	.	3800
0.50-0.99	.	3777	3411	78	19	7	.	.	.	.	7292
1.00-1.49	.	.	1973	208	67	4	.	.	.	.	2252
1.50-1.99	.	.	719	397	74	11	.	.	.	.	1202
2.00-2.49	.	.	2	456	48	34	3	.	.	.	543
2.50-2.99	.	.	.	86	62	26	2	.	.	.	176
3.00-3.49	.	.	.	11	8	37	2	2	.	.	60
3.50-3.99	2	21	4	.	.	.	27
4.00-4.49	1	4	10	.	1	.	16
4.50-4.99	3	.	1	.	6
5.00-5.49	2	.	.	4
5.50-5.99	3	.	.	7
6.00-6.49	6	1	.	2
6.50-6.99	2	.	.	0
7.00+	0
TOTAL	1575	5769	6277	1278	297	147	25	15	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 14403.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1156	1183	81	41	3	1	.	.	.	.	2465
0.50-0.99	.	2642	1635	1	6	10	.	1	.	.	4295
1.00-1.49	.	.	1473	3	.	.	.	.	.	.	1476
1.50-1.99	.	.	847	578	3	.	.	.	.	.	1428
2.00-2.49	.	.	11	596	.	2	1	.	.	.	610
2.50-2.99	.	.	.	152	22	.	.	.	.	.	175
3.00-3.49	45	.	.	.	.	.	45
3.50-3.99	10	1	.	.	.	.	11
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1156	3825	4047	1371	89	15	2	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 9834.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	517	917	65	16	6	2	.	.	.	.	1523
0.50-0.99	.	1943	959	4	7	8	1	.	.	.	2922
1.00-1.49	.	.	1186	1	1	.	.	.	.	.	1188
1.50-1.99	.	.	850	303	.	.	.	.	.	.	1153
2.00-2.49	.	.	2	295	1	.	.	.	.	.	298
2.50-2.99	.	.	.	51	17	.	.	.	.	.	68
3.00-3.49	.	.	.	2	17	.	.	.	.	.	19
3.50-3.99	3	.	.	.	.	.	7
4.00-4.49	3	.	.	.	.	3
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	517	2860	3062	671	52	19	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 6722.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	306	585	48	19	6	3	.	.	.	.	967
0.50-0.99	.	1598	732	8	10	14	.	1	.	.	2363
1.00-1.49	.	.	855	3	.	1	1	.	.	.	860
1.50-1.99	.	.	665	132	.	.	.	.	.	.	797
2.00-2.49	.	.	.	116	.	.	.	.	.	.	116
2.50-2.99	.	.	.	23	.	.	.	.	.	.	23
3.00-3.49	.	.	.	2	4	.	.	.	.	.	6
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	1	.	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	306	2183	2300	303	22	18	1	1	0	0	

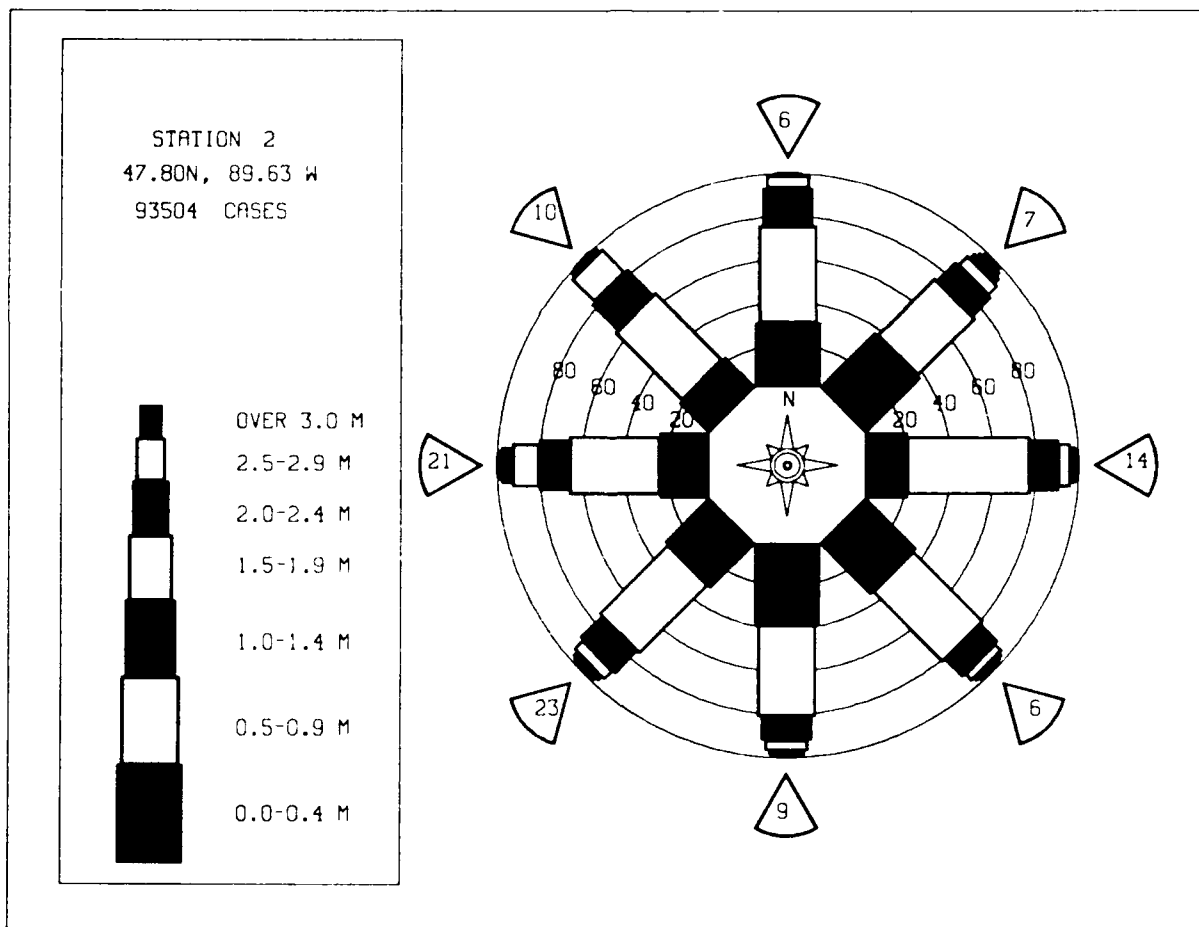
MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4809.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	217	535	24	18	7	1	.	.	.	.	802
0.50-0.99	.	1325	406	7	6	10	1	1	.	.	1756
1.00-1.49	.	.	737	1	1	1	.	.	.	.	741
1.50-1.99	.	.	358	35	1	.	.	.	.	.	394
2.00-2.49	.	.	.	50	.	.	.	.	.	.	50
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	217	1860	1530	115	15	12	2	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3515.

STATION S02 47.80N 89.63W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER
0.00-0.49				39	9	2				2724
0.50-0.99	922	1529	223	119	18	16	1			4578
1.00-1.49		2279	2145	185	29	16	1			1402
1.50-1.99			1179	301	46	9	1			801
2.00-2.49			444	228	30	3				281
2.50-2.99			3	2	47	12	2	3	2	105
3.00-3.49					12	2	1	2	1	46
3.50-3.99						14	5			17
4.00-4.49						2	1			7
4.50-4.99								1		2
5.00-5.49								1		1
5.50-5.99								1		1
6.00-6.49										0
6.50-6.99										0
7.00-7.49										0
TOTAL	922	3808	3994	913	193	108	15	9	3	0
MEAN HS(M)= 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S02 (47.80N 89.63W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.1	1.1	0.9	0.7	0.6	0.5	0.5	0.6	1.1	1.1	1.0	0.8
1957	1.0	1.0	0.8	0.8	0.8	0.6	0.5	0.5	0.7	0.7	1.1	1.1	0.8
1958	0.8	1.0	0.6	0.9	0.7	0.6	0.6	0.6	0.8	0.8	1.3	1.0	0.8
1959	0.9	1.0	0.9	0.8	0.9	0.6	0.6	0.5	0.9	0.8	1.1	1.1	0.8
1960	0.9	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.6	0.8	1.1	1.0	0.8
1961	0.8	0.8	0.9	0.8	0.6	0.5	0.4	0.4	0.7	0.8	0.9	1.0	0.7
1962	1.1	0.8	0.8	0.7	0.7	0.4	0.5	0.5	0.6	0.8	1.0	1.0	0.7
1963	1.0	1.0	0.9	0.7	0.6	0.5	0.5	0.5	0.6	0.7	1.0	1.1	0.8
1964	1.1	0.9	0.9	0.8	0.7	0.5	0.4	0.6	0.7	0.7	0.9	0.9	0.8
1965	1.3	1.3	0.9	0.8	0.7	0.6	0.5	0.5	0.7	1.0	1.5	1.4	0.9
1966	1.4	1.4	1.6	1.2	1.2	0.9	0.8	0.8	1.1	1.4	1.3	1.4	1.2
1967	1.4	1.3	1.4	1.2	1.1	0.9	0.8	0.8	1.0	1.5	1.3	1.8	1.2
1968	1.3	1.5	1.4	1.2	1.0	0.9	1.0	0.9	1.0	1.3	1.4	1.5	1.2
1969	1.4	0.9	1.0	0.8	0.8	0.6	0.5	0.7	0.7	0.9	1.0	0.9	0.9
1970	0.9	1.0	0.9	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.0	0.9	0.8
1971	1.1	1.0	0.9	0.8	0.7	0.5	0.6	0.6	0.7	1.0	1.0	0.9	0.8
1972	1.2	1.0	0.9	0.7	0.5	0.6	0.5	0.5	0.8	0.9	0.8	1.0	0.8
1973	1.0	0.8	0.8	0.8	0.6	0.5	0.5	0.4	0.7	0.8	1.0	0.9	0.7
1974	0.9	0.7	0.9	0.6	0.6	0.5	0.5	0.6	0.6	0.8	1.0	0.9	0.8
1975	1.1	0.9	1.1	0.6	0.5	0.5	0.6	0.6	0.7	1.0	1.0	0.9	0.8
1976	1.0	1.0	1.1	0.7	0.6	0.6	0.4	0.5	0.6	0.7	1.1	0.9	0.8
1977	1.1	1.1	1.2	0.5	0.6	0.4	0.5	0.5	0.7	0.7	0.9	1.1	0.8
1978	0.8	0.6	0.7	0.7	0.5	0.5	0.4	0.6	0.8	0.8	0.9	0.9	0.7
1979	0.8	0.7	0.8	0.6	0.5	0.5	0.4	0.5	0.6	0.6	0.9	0.9	0.6
1980	0.8	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.8	0.9	0.7	1.1	0.7
1981	0.8	0.9	0.9	0.7	0.5	0.6	0.4	0.4	0.8	0.8	0.8	0.8	0.7
1982	1.2	0.9	1.1	0.8	0.7	0.5	0.5	0.5	0.6	0.8	1.0	1.1	0.7
1983	1.0	0.9	1.0	0.7	0.6	0.5	0.5	0.4	0.7	0.7	1.3	1.2	0.8
1984	0.9	0.9	0.9	0.8	0.6	0.6	0.5	0.5	0.7	1.0	1.1	1.1	0.8
1985	1.1	0.8	1.1	0.7	0.6	0.7	0.4	0.5	0.7	0.9	0.9	1.1	0.8
1986	1.1	0.8	1.0	0.8	0.6	0.6	0.5	0.7	0.7	0.7	1.1	1.0	0.8
1987	0.7	0.8	0.9	0.5	0.4	0.3	0.4	0.4	0.4	0.7	0.8	0.7	0.6
MEAN	1.0	1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.7	0.9	1.0	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S02 (47.80N 89.63W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.5	3.4	5.0	3.2	2.2	1.7	1.6	1.7	2.6	3.1	3.9	3.3	
1957	3.1	3.0	2.7	3.3	2.7	2.4	1.9	2.1	2.6	2.5	3.6	2.9	
1958	3.0	2.8	2.2	3.3	2.5	2.0	2.2	2.1	2.9	2.5	3.5	2.9	
1959	2.7	2.4	2.9	2.9	2.9	2.7	2.4	2.2	3.0	2.0	3.0	2.7	
1960	2.7	3.2	2.6	3.3	2.0	1.8	1.5	2.1	2.8	1.9	3.0	3.3	
1961	2.1	3.3	2.8	2.3	1.1	1.5	1.1	1.6	2.7	2.0	2.8	3.1	
1962	3.7	3.2	3.6	2.3	1.9	1.7	1.1	1.7	2.1	1.5	4.1	3.8	
1963	2.6	2.2	2.9	2.2	2.4	2.1	1.1	1.6	2.4	2.2	2.7	3.4	
1964	3.4	3.4	2.6	2.8	3.3	1.7	1.3	3.3	2.8	3.6	3.0	3.3	
1965	3.8	3.5	3.0	2.6	2.4	2.0	1.1	1.6	3.1	3.4	3.3	4.0	
1966	4.5	4.2	5.5	5.7	3.0	3.0	2.8	2.4	3.9	5.7	5.5	4.9	
1967	5.9	3.2	4.6	4.3	3.1	3.3	2.3	3.3	3.1	3.6	4.5	4.6	
1968	3.9	4.0	4.1	3.3	3.0	2.6	4.4	3.3	2.9	4.4	4.5	4.9	
1969	3.7	2.3	2.8	2.6	2.3	2.8	1.5	2.9	2.8	2.8	3.3	3.8	
1970	2.3	2.3	3.1	3.0	2.3	1.9	1.7	1.8	2.0	0.0	3.3	3.9	
1971	2.6	3.1	4.6	2.2	2.6	1.5	1.8	1.8	2.7	5.8	3.3	3.6	
1972	4.4	3.1	2.2	2.3	1.4	2.0	1.8	2.2	2.9	3.1	2.2	2.0	
1973	2.9	2.8	2.6	2.3	2.8	1.3	1.9	1.2	2.4	3.7	2.8	3.4	
1974	4.5	3.3	2.4	2.0	2.0	1.6	2.1	2.8	1.6	2.7	2.2	3.3	
1975	5.7	3.5	4.6	1.8	2.3	1.8	1.9	2.4	3.1	5.6	3.5	3.2	
1976	2.9	2.6	4.3	2.1	1.9	1.8	1.4	1.6	2.6	3.0	3.5	3.5	
1977	2.9	3.6	4.6	1.6	2.0	1.6	1.9	1.7	2.2	2.4	6.0	3.8	
1978	2.1	1.7	2.8	2.0	1.7	2.2	1.1	1.7	2.5	2.9	3.7	4.6	
1979	3.0	2.3	2.6	2.5	2.3	2.5	1.9	1.7	2.5	1.7	4.1	3.1	
1980	3.1	1.9	2.6	1.9	1.7	1.3	1.2	2.5	4.2	3.5	2.2	3.7	
1981	2.1	1.9	2.9	2.9	1.5	2.8	1.1	1.1	4.8	2.5	3.3	2.6	
1982	3.6	2.3	6.2	2.7	1.7	2.1	2.0	1.5	1.9	3.3	5.8	4.0	
1983	4.1	3.7	3.1	2.9	1.7	1.8	1.8	1.6	2.2	2.2	4.9	3.6	
1984	3.7	2.4	3.9	4.2	2.2	2.9	1.7	1.8	2.4	3.8	3.6	3.2	
1985	4.3	2.9	4.4	2.4	2.0	2.4	1.5	1.8	3.7	3.9	2.4	3.3	
1986	4.1	2.5	3.9	2.5	2.6	1.5	1.8	1.6	2.0	3.8	5.5	2.7	
1987	2.1	2.8	2.8	1.6	1.8	1.1	1.5	1.4	1.5	2.3	3.3	2.6	

32 YR. STATISTICS FOR WIS STATION S02

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRFCTION BAND	(DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.1
LARGEST WAVE HS	(METERS)	6.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	246.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		82031318

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	360	787	59	27	4	1					1238
0.50-0.99		1362	194	21		20	5	3			1614
1.00-1.49			565	13	6	1	1	1			587
1.50-1.99			132	3	1						137
2.00-2.49			5	8						1	14
2.50-2.99				2					1		3
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	360	2149	955	74	20	23	6	4	1	1	3369
MEAN HS(M) = 0.7	LARGEST HS(M) =		2.8	MEAN TP(SEC) =		3.3	NO. OF CASES =		3369.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	421	719	68	21	4	3	.	.	.	1236	
0.50-0.99	.	1052	382	55	13	10	3	.	.	1515	
1.00-1.49	.	.	312	109	21	4	2	.	1	451	
1.50-1.99	.	.	116	33	33	12	.	2	.	197	
2.00-2.49	.	.	9	23	3	22	.	.	.	57	
2.50-2.99	.	.	.	8	.	4	.	.	.	12	
3.00-3.49	.	.	.	1	3	.	.	1	.	5	
3.50-3.99	1	1	
4.00-4.49	0	
4.50-4.99	0	
5.00-5.49	0	
5.50-5.99	0	
6.00-6.49	0	
6.50-6.99	0	
7.00+	0	
TOTAL	421	1771	887	250	77	55	5	6	2	0	
MEAN HS(M) = 0.7	LARGEST HS(M) =		3.8	MEAN TP(SEC) =		3.5	NO. OF CASES =		3260.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	660	947	82	25	5		.	.	.	.	1719
0.50-0.99		916	483	45		8	.	.	.	.	1461
1.00-1.49			205	139	17	4	2	2	.	.	369
1.50-1.99			21	68	45	7	1	1	2	.	145
2.00-2.49				11	22	53	.	.	1	.	87
2.50-2.99					3	22	4	1	1	.	31
3.00-3.49					4	1	6	.	.	.	11
3.50-3.99						2		.	.	1	3
4.00-4.49							1	.	.	1	2
4.50-4.99								.	.	.	0
5.00-5.49								.	.	.	0
5.50-5.99								.	.	.	0
6.00-6.49								.	.	.	0
6.50-6.99								.	.	.	0
7.00+								.	.	.	0
TOTAL	660	1863	791	288	105	97	14	4	4	2	3592.
MEAN HS(M) = 0.7	LARGEST HS(M) =		4.4	MEAN TP(SEC) =		3.5	NO. OF CASES =		3592.		

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	474	1021	73	22	3						1593
0.50-0.99		918	946	49	14	12	1				1940
1.00-1.49			533	79		6	2				630
1.50-1.99			45	155	22	6	1	1			230
2.00-2.49				126	23	10					159
2.50-2.99				33	28	18	2	2	1	1	82
3.00-3.49					17	7	4		4		35
3.50-3.99					2	3	2	3	3	2	13
4.00-4.49						8	3	1		1	12
4.50-4.99						1		1			2
5.00-5.49						2		1			3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	474	1939	1597	464	118	73	15	12	8	5	
MEAN HS(M) = 0.8	LARGEST HS(M)=		5.3	MEAN TP(SEC)=		3.8	NO. OF CASES=		4415.		

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	534	1309	111	25	2	1	.	.	.	.	1982
0.50-0.99	.	1625	3014	116	23	11	.	.	.	.	4789
1.00-1.49	.	.	1796	59	17	11	8	2	.	.	1893
1.50-1.99	.	.	182	408	20	34	6	3	1	.	854
2.00-2.49	.	.	.	287	4	14	5	5	.	.	315
2.50-2.99	.	.	.	84	21	5	8	12	8	.	138
3.00-3.49	.	.	.	3	26	.	.	12	9	1	51
3.50-3.99	17	2	1	3	7	7	37
4.00-4.49	1	.	1	4	2	8
4.50-4.99	1	.	.	.	1	2
5.00-5.49	1	.	.	1	1	3
5.50-5.99	2	2
6.00-6.49	1	1
6.50-6.99	0
7.00+	0
TOTAL	534	2934	5103	982	130	81	28	38	30	15	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 9254.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	269	625	54	12	1	.	.	.	.	.	961
0.50-0.99	.	591	1330	34	7	6	.	.	.	.	1968
1.00-1.49	.	.	622	125	13	2	.	.	.	.	762
1.50-1.99	.	.	38	183	29	8	.	.	.	.	258
2.00-2.49	.	.	.	77	17	9	3	1	.	.	107
2.50-2.99	.	.	.	19	31	6	8	6	.	.	70
3.00-3.49	6	10	4	3	1	.	24
3.50-3.99	2	10	1	3	1	.	17
4.00-4.49	2	3	1	5	1	12
4.50-4.99	1	1	.	2
5.00-5.49	2	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	269	1216	2044	450	106	53	19	17	8	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3926.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	298	627	96	18	8	1	.	.	.	.	1048
0.50-0.99	.	494	897	26	5	8	.	.	.	.	1430
1.00-1.49	.	.	225	120	3	4	1	.	.	.	353
1.50-1.99	.	.	18	84	25	1	.	.	.	.	128
2.00-2.49	.	.	.	34	17	3	.	.	.	.	54
2.50-2.99	26	6	1	2	.	.	35
3.00-3.49	4	11	1	1	.	.	16
3.50-3.99	10	1	.	.	.	11
4.00-4.49	3	1	.	.	.	4
4.50-4.99	1	1	.	.	2
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	298	1121	1236	282	88	47	6	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 2893.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	459	1170	155	22	5	1	.	.	.	.	1812
0.50-0.99	.	607	1234	23	7	13	.	.	.	.	1884
1.00-1.49	.	.	207	151	2	5	.	.	.	.	365
1.50-1.99	.	.	17	89	22	6	.	.	.	.	128
2.00-2.49	.	.	.	21	16	6	.	.	.	.	43
2.50-2.99	19	1	.	.	.	.	25
3.00-3.49	11	.	.	.	.	11
3.50-3.99	7	1	.	.	.	8
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	459	1777	1613	306	71	49	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4008.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	566	1233	235	17	2						2053
0.50-0.99		585	1411	54	11	7	1				2069
1.00-1.49			322	219	18	3					552
1.50-1.99			32	171	33	1					237
2.00-2.49				55	25	6					86
2.50-2.99				3	41	2					46
3.00-3.49					1	21					22
3.50-3.99						3	1				4
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	566	1818	2000	519	121	43	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4749.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	638	1287	417	42	9	1					2394
0.50-0.99		770	1605	187	9	6					2577
1.00-1.49			425	272	37	2					736
1.50-1.99			48	202	50	4					304
2.00-2.49				85	23	9					117
2.50-2.99				4	57	7					68
3.00-3.49					4	33					37
3.50-3.99						11	3				14
4.00-4.49						2	4				6
4.50-4.99							3				3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	638	2057	2495	792	189	75	10	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 5861.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1353	2283	1078	118	19	3					4854
0.50-0.99		2430	2776	768	74	3		1			6054
1.00-1.49			886	633	182	26	1				1728
1.50-1.99			102	303	183	48	4				640
2.00-2.49				119	74	43	5				243
2.50-2.99				4	84	37	4	1			130
3.00-3.49					10	72	1	2			85
3.50-3.99						33	20				53
4.00-4.49						5	20	6			28
4.50-4.99							6		2		14
5.00-5.49								10	4		14
5.50-5.99								2			0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1353	4713	4844	1945	626	272	61	25	10	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 12969.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	2090	3611	237	68	21	4					6031
0.50-0.99		4007	623	233	29	6	2				4900
1.00-1.49			1299	73	53	3					1428
1.50-1.99			572	65	147	10					794
2.00-2.49			56	40	12	22	1				131
2.50-2.99				6	13	8					28
3.00-3.49				1	2	11	1				15
3.50-3.99						3	2				5
4.00-4.49						2	4				6
4.50-4.99											0
5.00-5.49								2			2
5.50-5.99								3			3
6.00-6.49									3		3
6.50-6.99											0
7.00+											0
TOTAL	2090	7618	2787	486	277	69	11	5	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 12494.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1484	1958	118	83	14	7					3664
0.50-0.99		2187	312	5	16	22	1	1			2544
1.00-1.49			1047			2					1050
1.50-1.99			504	1							505
2.00-2.49			68	52							120
2.50-2.99				18							18
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1484	4146	2049	160	30	31	1	1	0	0	7395

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 7395.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	654	1136	80	32	6	3					1911
0.50-0.99		1849	586	7	11	10	1				2464
1.00-1.49			856	1	1		1				859
1.50-1.99			612	96							708
2.00-2.49			9	134							143
2.50-2.99				31							31
3.00-3.49				4	1						5
3.50-3.99											1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	654	2985	2143	305	20	13	2	0	0	0	5732

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 5732.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	361	651	56	25	4	3					1100
0.50-0.99		1842	926	10	18	20		2			2818
1.00-1.49			906	3	2	1	1				913
1.50-1.99			823	146							969
2.00-2.49				139							139
2.50-2.99				26							26
3.00-3.49				4	3						7
3.50-3.99					1						1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	361	2493	2711	353	28	24	1	2	0	0	5593

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 5593.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

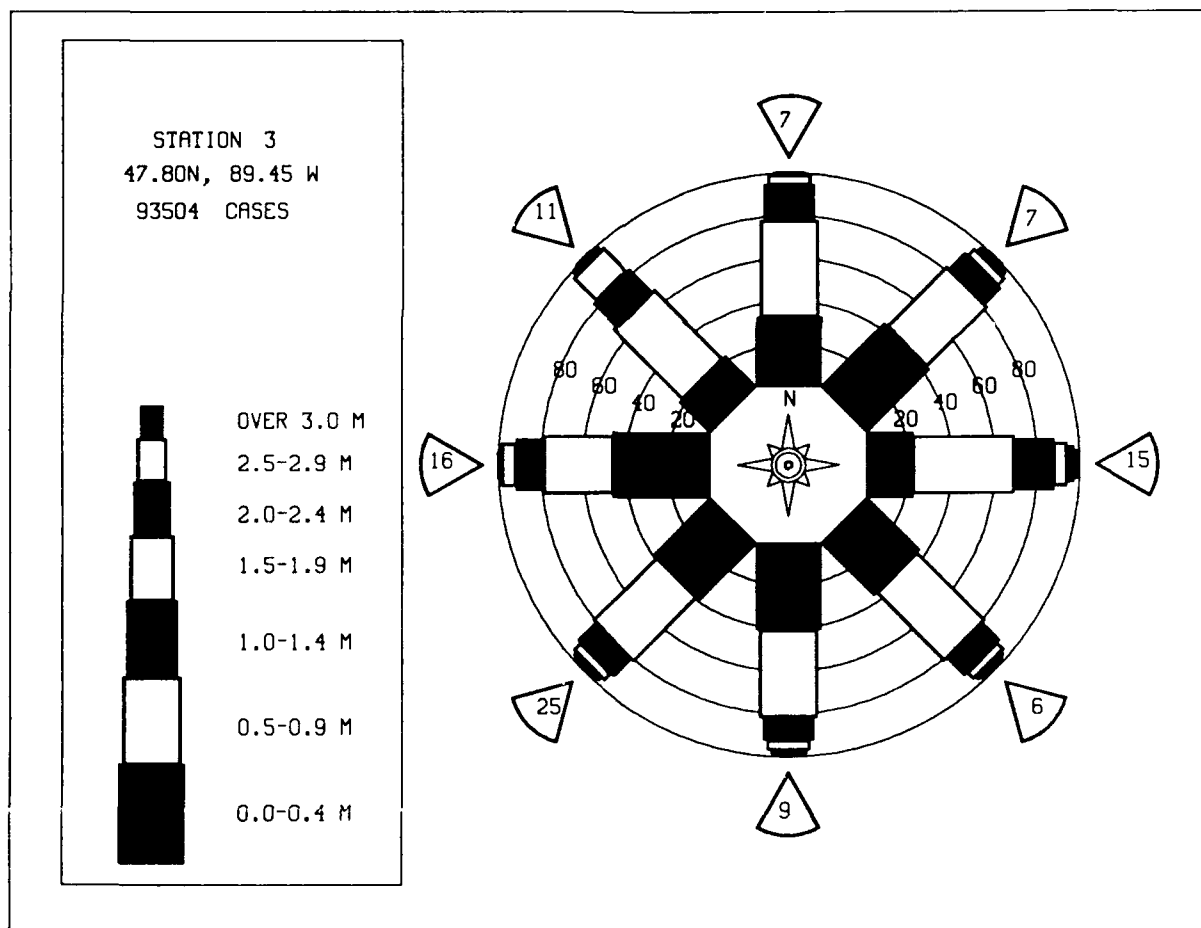
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	264	581	38	23	8	1					915
0.50-0.99		1563	448	7	13	13	3				2047
1.00-1.49			793	2	1	2	1				799
1.50-1.99			401	42	1						444
2.00-2.49			2	52							54
2.50-2.99				4							4
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	264	2144	1682	130	23	16	4	0	0	0	3994

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 3994.

STATION S03 47.80N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1089	1995	296	58	12	3	.	.	.	.	3453
0.50-0.99	.	2280	1717	164	27	18	1	.	.	.	4207
1.00-1.49	.	.	1100	200	37	8	2	.	.	.	1347
1.50-1.99	.	.	367	205	61	13	1	.	.	.	647
2.00-2.49	.	.	15	127	24	20	1	.	.	.	187
2.50-2.99	.	.	.	24	32	12	2	2	1	.	73
3.00-3.49	.	.	.	1	8	18	1	2	1	.	31
3.50-3.99	2	8	3	.	1	1	15
4.00-4.49	2	3	.	.	.	5
4.50-4.99	1	1	.	.	2
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1089	4275	3495	779	203	102	15	6	3	1	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S03 (47.80N 89.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.9	1.0	0.8	0.7	0.6	0.5	0.5	0.6	1.0	1.0	0.9	0.8
1957	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1958	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1959	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1960	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1961	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1962	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1963	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1964	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1965	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1966	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1967	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1968	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1969	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1970	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1971	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1972	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1973	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1974	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1975	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1976	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1977	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1978	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1979	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1980	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1981	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1982	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1983	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1984	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1985	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1986	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1987	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
MEAN	0.9	0.9	0.9	0.7	0.7	0.5	0.5	0.5	0.7	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S03 (47.80N 89.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.6	3.8	5.4	2.7	2.3	1.6	1.3	1.4	2.6	2.9	3.2	3.7
1957	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1958	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1959	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1960	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1961	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1962	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1963	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1964	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1965	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1966	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1967	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1968	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1969	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1970	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1971	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1972	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1973	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1974	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1975	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1976	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1977	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1978	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1979	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1980	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1981	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1982	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1983	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1984	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1985	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1986	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0
1987	2.9	3.0	2.5	3.3	2.3	2.3	1.5	2.1	1.9	2.7	2.6	3.0

32 YR. STATISTICS FOR WIS STATION S03

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.1
LARGEST WAVE HS (METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	96.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	65112700

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	306	705	157	36	11	6	8	1	.	.	1221
0.50-0.99	.	1001	351	103	58	22	10	5	.	.	1544
1.00-1.49	.	.	381	48	38	34	12	13	.	.	516
1.50-1.99	.	.	103	1	14	18	1	9	.	.	161
2.00-2.49	.	.	4	1	2	4	1	1	.	.	22
2.50-2.99	1	2	2
3.00-3.49	1	1	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	306	1706	996	190	123	87	32	29	3	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 3265.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	312	560	124	36	6	1	.	.	.	.	1039
0.50-0.99	.	578	485	98	24	20	.	.	.	.	1205
1.00-1.49	.	.	321	68	26	24	11	2	.	.	452
1.50-1.99	.	.	64	68	33	18	4	2	.	.	189
2.00-2.49	.	.	1	57	13	13	1	4	1	.	90
2.50-2.99	.	.	.	14	4	8	5	5	.	.	38
3.00-3.49	6	1	7	4	2	.	20
3.50-3.99	2	1	1	4	.	1	9
4.00-4.49	2	.	.	1	.	3
4.50-4.99	1	1
5.00-5.49	1	.	.	1
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	312	1138	995	341	114	88	29	22	7	2	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2866.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	502	759	189	43	4	1	.	.	.	.	1498
0.50-0.99	.	466	685	100	18	10	.	.	.	.	1270
1.00-1.49	.	.	359	88	24	10	.	.	.	.	481
1.50-1.99	.	.	40	95	35	19	.	.	.	.	193
2.00-2.49	.	.	.	34	20	19	12	2	.	.	87
2.50-2.99	.	.	.	3	2	38	5	3	1	.	52
3.00-3.49	12	7	7	.	.	30
3.50-3.99	2	10	1	3	1	26
4.00-4.49	5
4.50-4.99	1
5.00-5.49	2	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	502	1225	1273	363	103	102	36	15	15	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 3413.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	390	829	134	26	3	.	.	.	.	.	1382
0.50-0.99	.	501	1162	112	19	1	.	.	.	.	1795
1.00-1.49	.	.	306	202	32	8	1	.	.	.	549
1.50-1.99	.	.	29	120	43	18	.	.	.	.	210
2.00-2.49	.	.	.	55	37	19	6	.	.	.	117
2.50-2.99	.	.	.	2	41	19	4	4	.	.	70
3.00-3.49	1	20	4	3	4	.	32
3.50-3.99	13	10	6	4	.	33
4.00-4.49	1	11	4	6	.	22
4.50-4.99	4	4	4	1	13
5.00-5.49	2	1	1	.	4
5.50-5.99	1	.	4	.	5
6.00-6.49	3	.	3
6.50-6.99	2	1	3
7.00+	3	3
TOTAL	390	1330	1631	517	176	99	43	22	28	5	

MEAN HS(M) = 0.8 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 3984.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	499	1251	118	14	3	.	.	.	.	.	1885
0.50-0.99	.	1070	3161	160	12	7	.	.	.	.	4410
1.00-1.49	.	.	890	928	64	7	2	.	.	.	1891
1.50-1.99	.	.	37	429	202	38	2	.	.	.	708
2.00-2.49	.	.	.	126	98	96	7	1	.	.	328
2.50-2.99	.	.	.	2	134	50	24	8	.	.	218
3.00-3.49	4	90	19	13	1	.	127
3.50-3.99	56	29	12	8	.	105
4.00-4.49	6	41	25	13	.	85
4.50-4.99	5	35	12	1	53
5.00-5.49	21	17	4	42
5.50-5.99	5	14	1	20
6.00-6.49	13	11	24
6.50-6.99	4	10	14
7.00+	1	19	20
TOTAL	499	2321	4206	1659	517	350	129	120	83	46	

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 9311.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	300	745	84	14	2	.	.	.	.	.	1145
0.50-0.99	.	557	1540	78	9	4	.	.	.	.	2188
1.00-1.49	.	.	339	389	22	1	1	.	.	.	753
1.50-1.99	.	.	16	171	70	11	1	.	.	.	269
2.00-2.49	.	.	.	44	35	23	5	1	.	.	108
2.50-2.99	55	16	8	3	.	.	82
3.00-3.49	1	23	2	2	.	.	28
3.50-3.99	20	5	6	.	.	31
4.00-4.49	7	4	.	.	11
4.50-4.99	1	4	1	1	7
5.00-5.49	1	1	.	2
5.50-5.99	3	.	3
6.00-6.49	1	4
6.50-6.99	0
7.00+	0
TOTAL	300	1302	1979	696	194	99	30	21	8	2	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4343.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	407	770	134	13	3	2	.	.	.	.	1329
0.50-0.99	.	377	910	29	7	5	.	.	.	.	1328
1.00-1.49	.	.	180	140	9	4	.	.	.	.	333
1.50-1.99	.	.	10	77	33	1	1	.	.	.	122
2.00-2.49	.	.	.	12	22	4	1	2	.	.	41
2.50-2.99	25	4	.	1	.	.	30
3.00-3.49	2	10	.	2	1	.	15
3.50-3.99	6	.	1	.	.	7
4.00-4.49	1	1	1	.	.	3
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	407	1147	1234	271	101	37	3	8	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3012.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	422	1080	157	20	4	.	.	.	.	.	1683
0.50-0.99	.	503	973	32	6	3	.	.	.	.	1517
1.00-1.49	.	.	198	128	7	6	1	.	.	.	340
1.50-1.99	.	.	12	78	14	1	4	.	.	.	109
2.00-2.49	.	.	.	9	17	1	.	2	.	.	29
2.50-2.99	18	5	.	.	.	.	23
3.00-3.49	1	8	.	.	.	.	9
3.50-3.99	3	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	422	1583	1340	267	67	27	5	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3481.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	514	1144	220	34	3	1	.	.	.	.	1916
0.50-0.99	.	449	1228	47	8	2	.	.	.	.	1734
1.00-1.49	.	.	231	173	11	5	.	.	.	.	422
1.50-1.99	.	.	23	134	26	3	2	.	.	.	186
2.00-2.49	.	.	.	40	24	6	.	.	.	.	70
2.50-2.99	.	.	.	1	40	4	.	.	.	.	45
3.00-3.49	7	.	.	.	.	7
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	514	1593	1702	429	112	29	3	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4107.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	557	1298	329	42	4	.	.	.	.	.	2230
0.50-0.99	.	506	1526	84	8	.	.	.	.	.	2128
1.00-1.49	.	.	330	262	20	4	.	.	.	.	616
1.50-1.99	.	.	27	168	36	1	1	.	.	.	233
2.00-2.49	.	.	.	52	20	6	.	.	.	.	78
2.50-2.99	33	5	.	.	.	.	38
3.00-3.49	2	21	.	.	.	.	23
3.50-3.99	5	.	.	.	.	5
4.00-4.49	1	.	.	.	.	1
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	557	1804	2212	608	123	47	2	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 5015.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	960	2074	757	84	17	1	.	.	.	.	3893
0.50-0.99	.	851	2734	401	21	10	.	.	.	.	4018
1.00-1.49	.	3	662	498	63	1	1	.	.	.	1228
1.50-1.99	.	.	62	290	113	5	.	1	.	.	471
2.00-2.49	.	.	1	106	60	28	.	1	.	.	196
2.50-2.99	.	.	.	1	102	27	.	.	.	.	131
3.00-3.49	3	78	1	.	.	.	82
3.50-3.99	36	5	.	.	.	41
4.00-4.49	7	10	.	.	.	17
4.50-4.99	5	.	.	.	8
5.00-5.49	3	.	.	3
5.50-5.99	3	1	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	960	2928	4216	1380	379	193	24	10	1	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 9449.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1419	2525	377	110	20	3	.	.	.	.	4454
0.50-0.99	.	1551	3020	89	25	6	1	.	.	.	4692
1.00-1.49	.	.	2051	97	14	4	.	.	.	.	2167
1.50-1.99	.	.	219	568	37	3	.	1	.	.	827
2.00-2.49	.	.	.	401	34	8	.	.	.	.	443
2.50-2.99	.	.	.	45	90	17	1	.	.	.	153
3.00-3.49	23	36	2	1	.	.	62
3.50-3.99	24	6	.	.	.	30
4.00-4.49	5	2	.	.	.	7
4.50-4.99	4	1	.	.	5
5.00-5.49	1	1	.	7
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1419	4076	5667	1310	243	106	16	11	1	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 12028.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1435	2156	383	129	32	9	1	.	.	.	4145
0.50-0.99	.	1598	2414	100	28	20	1	.	.	.	4161
1.00-1.49	.	.	2207	16	5	3	2	.	.	.	2233
1.50-1.99	.	.	310	952	2	3	1	.	.	.	1266
2.00-2.49	.	.	3	810	2	.	.	1	.	.	816
2.50-2.99	.	.	.	58	155	.	.	.	.	.	213
3.00-3.49	56	3	1	.	.	.	60
3.50-3.99	2	10	.	.	.	.	12
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1435	3754	5317	2065	280	50	6	1	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 12081.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	637	1305	206	57	10	2	.	.	.	.	2217
0.50-0.99	.	1921	1338	70	36	21	.	.	.	.	3386
1.00-1.49	.	.	1465	12	9	4	3	1	.	.	1494
1.50-1.99	.	.	799	385	2	1	.	.	.	.	1187
2.00-2.49	.	.	10	370	1	.	.	.	.	.	381
2.50-2.99	.	.	.	41	47	.	.	.	1	.	89
3.00-3.49	24	.	.	.	.	.	24
3.50-3.99	4	7	.	.	.	.	11
4.00-4.49	2	.	.	.	.	2
4.50-4.99	2	.	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	637	3226	3818	935	133	39	3	1	1	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 8234.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	330	714	170	33	9	6	.	.	.	.	1262
0.50-0.99	.	1735	840	67	33	24	3	.	.	.	2702
1.00-1.49	.	.	791	9	14	6	4	.	.	.	824
1.50-1.99	.	.	539	87	4	5	2	.	.	.	637
2.00-2.49	.	.	1	71	.	.	.	.	.	.	72
2.50-2.99	.	.	.	9	.	.	.	1	.	.	10
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	330	2449	2341	276	61	41	9	1	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5160.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	235	559	127	36	11	5	.	.	.	.	973
0.50-0.99	.	1356	485	77	34	22	5	.	.	.	1979
1.00-1.49	.	.	602	12	18	13	3	2	.	.	650
1.50-1.99	.	.	329	32	6	3	1	.	.	.	371
2.00-2.49	.	.	4	25	.	.	.	1	.	.	30
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	1915	1547	185	63	46	11	4	0	1	0

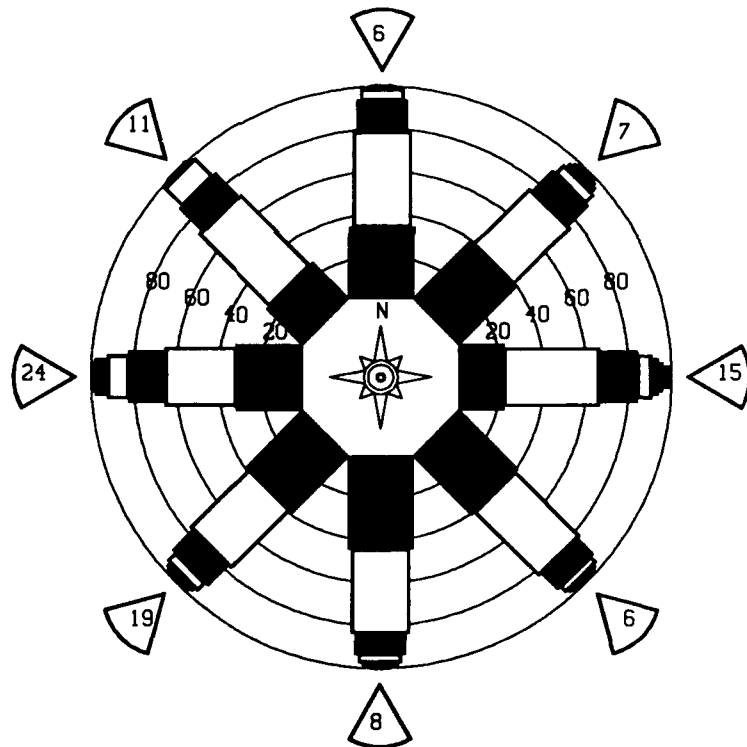
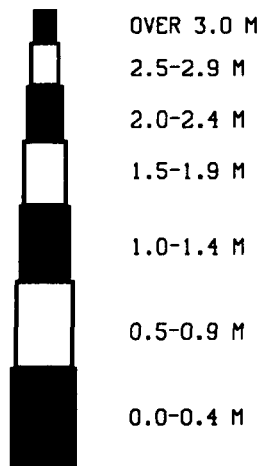
MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3755.

STATION S04 47.67N 90.07W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	923	1848	367	73	14	3					3228
0.50-0.99		1502	2285	165	35	17	2				4006
1.00-1.49			1132	307	38	14	4	1			1496
1.50-1.99			262	366	66	15	3	1			713
2.00-2.49				222	39	23	3	2			291
2.50-2.99				18	75	19	5	2			119
3.00-3.49					12	31	4	2	1		50
3.50-3.99						18	6	3	2		29
4.00-4.49						2	7	3	2		14
4.50-4.99							2	4	1		5
5.00-5.49								3	2		3
5.50-5.99								1	2		3
6.00-6.49									2	1	3
6.50-6.99										1	1
7.00+										2	2
TOTAL	923	3350	4048	1151	279	142	36	22	12	4	

MEAN HS(M)= 0.8 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 4
 47.67N, 90.07 W
 93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S04 (47.67N 90.07W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.8	1.1	1.1	0.9	0.8	0.6	0.5	0.5	0.6	1.1	1.1	1.0	0.8
1957	1.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.7	0.9	1.1	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.8	0.7	0.6
MEAN	1.0	0.9	1.0	0.8	0.7	0.6	0.5	0.5	0.7	0.9	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S04 (47.67N 90.07W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	4.3	5.6	7.6	3.9	3.0	1.8	1.6	1.7	2.3	3.2	3.8	4.6	
1957	3.0	3.2	2.7	4.3	2.9	2.2	1.9	1.6	2.1	1.9	2.8	3.0	
1958	2.8	2.9	2.0	5.4	2.6	2.5	2.1	1.9	2.4	3.1	3.6	3.2	
1959	2.5	4.4	2.9	3.0	3.6	1.8	2.1	2.2	2.7	2.5	4.4	6.8	
1960	2.9	3.2	3.1	3.0	3.7	2.1	1.5	2.3	2.0	2.6	6.6	3.7	
1961	2.2	3.0	3.3	3.3	2.2	1.4	1.6	1.5	2.4	2.5	3.3	3.2	
1962	3.5	4.1	4.3	2.5	2.2	1.4	1.7	1.7	2.4	5.5	3.9	3.5	
1963	2.5	3.3	3.5	2.2	2.7	3.1	1.9	1.4	2.0	2.4	2.8	3.5	
1964	5.0	3.3	2.6	3.0	3.2	1.8	1.3	2.8	2.8	3.1	1.1	3.1	
1965	3.7	5.5	5.0	3.3	3.5	2.0	1.4	1.6	3.0	3.4	4.4	7.4	
1966	4.8	3.3	5.9	6.3	3.2	3.0	3.3	3.3	3.3	4.0	5.5	5.0	
1967	6.6	3.6	5.4	3.9	4.3	3.5	2.5	1.9	2.7	5.5	4.4	6.9	
1968	3.6	3.6	3.8	4.4	3.2	2.4	3.9	2.2	2.8	3.3	3.8	6.0	
1969	6.3	3.6	2.8	2.9	2.8	3.5	1.2	2.6	2.3	3.3	4.4	4.2	
1970	2.4	4.4	6.0	4.4	2.6	1.7	1.6	2.0	2.9	3.3	3.8	3.6	
1971	2.5	4.3	3.9	2.6	4.0	1.7	1.8	2.0	2.3	5.4	4.4	3.6	
1972	4.0	3.3	3.7	2.9	1.6	1.6	1.6	1.7	2.6	3.3	2.9	7.7	
1973	3.5	2.6	3.8	2.2	2.5	1.8	1.9	0.9	2.4	3.3	3.3	3.0	
1974	4.2	2.1	4.3	3.4	2.8	1.6	2.2	2.4	1.6	3.3	3.3	5.0	
1975	5.7	2.9	6.2	2.5	1.7	1.7	2.1	3.1	2.8	4.4	3.3	3.0	
1976	4.0	3.3	4.5	2.1	2.1	1.9	1.2	1.6	2.6	3.3	3.3	3.3	
1977	3.0	6.8	5.8	1.9	1.8	1.5	2.0	1.7	5.1	3.3	3.3	7.6	
1978	2.4	1.9	3.2	2.8	1.7	2.0	1.2	1.5	3.7	3.3	3.3	4.6	
1979	2.5	3.4	3.0	4.5	2.1	1.7	1.7	1.7	2.3	3.3	3.3	3.0	
1980	3.3	3.7	3.7	1.7	1.7	1.6	1.1	2.4	3.9	3.3	3.3	3.7	
1981	2.2	2.6	3.1	3.3	1.6	2.7	1.2	1.3	4.0	3.3	3.3	2.3	
1982	5.6	4.0	4.2	2.2	2.5	2.3	2.1	1.6	2.6	3.3	3.3	3.8	
1983	3.8	3.8	6.1	2.9	1.7	1.9	1.7	1.7	2.3	2.2	3.3	4.7	
1984	3.6	4.0	3.9	3.8	2.3	2.4	1.9	1.7	2.3	3.3	3.3	3.4	
1985	3.4	3.3	3.0	3.2	2.0	2.6	1.5	2.4	3.0	3.3	3.3	3.2	
1986	4.4	4.0	3.0	3.2	2.2	1.5	1.8	1.6	3.9	3.7	3.3	3.2	
1987	2.0	5.3	5.6	2.1	2.3	1.2	1.5	1.3	1.5	1.9	3.1	3.0	

32 YR. STATISTICS FOR WIS STATION S04

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	9.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66030418

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	359	760	172	47	12	6					1356
0.50-0.99		1074	267	136	55	25	10	1			1568
1.00-1.49			366	35	38	32	13	6	1		491
1.50-1.99			66		6	23	11	11	1		118
2.00-2.49			2	1	1	3	1	7	2	2	19
2.50-2.99						1	1	1	3		6
3.00-3.49								1		1	2
3.50-3.99										1	1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	356	1834	873	219	112	90	36	27	7	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 3343.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	393	582	167	31	10	4					1187
0.50-0.99		674	424	122	35	19	2				1276
1.00-1.49			176	127	72	32	9	4			420
1.50-1.99			42	36	38	37	7	7			167
2.00-2.49			1	7	2	21	6	7	1		45
2.50-2.99				4		5	11	7	3		30
3.00-3.49				2				5	1	2	10
3.50-3.99								1	2		3
4.00-4.49									1		2
4.50-4.99										2	2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	393	1256	810	329	157	118	35	31	8	5	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 2954.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	531	827	216	50	5	2					1631
0.50-0.99		557	630	124	17	11					1339
1.00-1.49			188	145	50	17	4				404
1.50-1.99			6	53	47	26	6	3			141
2.00-2.49				8	12	26	9	6			61
2.50-2.99					1	17	9	7	1		35
3.00-3.49						2	8	10	1		21
3.50-3.99							3	7	5	1	16
4.00-4.49									1		2
4.50-4.99									2	2	4
5.00-5.49									1		1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	531	1384	1040	380	132	101	39	33	11	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3432.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	460	857	149	28	4						1498
0.50-0.99		556	951	121	11	3					1642
1.00-1.49			238	194	37	8					477
1.50-1.99			17	90	40	20	1				168
2.00-2.49				37	17	20	7	2			83
2.50-2.99				1	28	23	2	4			58
3.00-3.49					4	17	5	5	2		33
3.50-3.99						5	8	8	7		28
4.00-4.49						2	7	2	6	1	18
4.50-4.99							3	2	3		8
5.00-5.49								1	4		5
5.50-5.99							1	1	1	1	4
6.00-6.49									1	1	2
6.50-6.99									2	1	3
7.00+											1
TOTAL	460	1413	1355	471	141	98	34	25	26	5	

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3785.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	516	1252	158	17	4	2	.	.	.	.	1949
0.50-0.99	.	1085	3057	194	12	7	.	.	.	.	4352
1.00-1.49	.	.	866	910	68	2	.	.	.	.	1853
1.50-1.99	.	.	35	416	218	43	2	.	.	.	714
2.00-2.49	.	.	.	103	101	104	25	3	.	.	322
2.50-2.99	.	.	.	1	115	53	25	19	1	.	206
3.00-3.49	8	90	20	17	8	.	137
3.50-3.99	45	21	10	8	.	84
4.00-4.49	2	37	25	16	.	80
4.50-4.99	7	27	18	4	56
5.00-5.49	2	23	14	5	44
5.50-5.99	2	11	5	18
6.00-6.49	12	7	19
6.50-6.99	4	9	13
7.00+	22	22
TOTAL	516	2337	4116	1641	526	352	127	116	86	52	

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 9253.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	380	811	121	11	3	.	.	.	.	.	1326
0.50-0.99	.	578	1607	90	8	3	.	.	.	.	2286
1.00-1.49	.	.	327	422	27	.	1	.	.	.	777
1.50-1.99	.	.	22	152	80	10	2	.	.	.	266
2.00-2.49	.	.	.	39	34	22	5	1	.	.	101
2.50-2.99	.	.	.	2	39	20	8	2	.	.	71
3.00-3.49	2	22	4	4	1	.	33
3.50-3.99	14	5	6	1	.	26
4.00-4.49	8	5	.	.	13
4.50-4.99	1	1	1	1	4
5.00-5.49	3	.	.	3
5.50-5.99	1	2	.	3
6.00-6.49	2	1	.	3
6.50-6.99	1	.	.	1
7.00+	0
TOTAL	380	1389	2077	716	193	91	34	19	10	4	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 4611.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	450	832	179	24	5	.	.	.	.	.	1490
0.50-0.99	.	362	927	43	6	.	.	.	.	.	1342
1.00-1.49	.	.	190	145	13	3	.	.	.	.	351
1.50-1.99	.	.	8	67	28	2	2	.	.	.	107
2.00-2.49	.	.	.	21	29	5	.	2	.	.	57
2.50-2.99	20	6	.	.	.	.	26
3.00-3.49	2	18	.	2	1	.	23
3.50-3.99	2	.	1	.	.	3
4.00-4.49	2	1	.	.	5
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	450	1194	1304	300	103	42	4	6	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3194.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	533	1150	189	27	5	.	.	.	.	.	1904
0.50-0.99	.	486	1018	42	7	2	.	.	.	.	1553
1.00-1.49	.	.	182	124	6	2	.	.	.	.	318
1.50-1.99	.	.	12	63	20	3	2	1	.	.	101
2.00-2.49	.	.	.	16	9	.	.	.	.	.	28
2.50-2.99	.	.	.	1	16	5	.	3	.	.	23
3.00-3.49	1	2	.	.	1	.	6
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	533	1636	1401	273	64	21	4	4	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3691.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	599	1268	325	31	5	1	.	.	.	.	2229
0.50-0.99	.	419	1322	63	6	3	.	.	.	.	1813
1.00-1.49	.	1	228	203	18	5	1	.	.	.	456
1.50-1.99	.	.	22	136	39	4	.	.	.	.	201
2.00-2.49	.	.	.	31	22	16	.	1	.	.	70
2.50-2.99	.	.	.	1	24	6	.	.	.	.	31
3.00-3.49	1	13	.	.	.	.	14
3.50-3.99	0
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	599	1688	1897	465	115	48	2	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4512.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	658	1440	497	48	9	1	.	.	.	.	2653
0.50-0.99	.	541	1661	149	12	4	.	.	.	.	2367
1.00-1.49	.	.	362	284	22	2	1	.	.	.	671
1.50-1.99	.	.	18	146	40	.	.	.	.	.	204
2.00-2.49	.	.	.	43	22	8	.	.	.	.	73
2.50-2.99	29	7	.	.	.	.	36
3.00-3.49	5	14	.	.	.	.	19
3.50-3.99	6	.	.	.	.	7
4.00-4.49	1	1	.	.	.	3
4.50-4.99	2	.	.	.	1
5.00-5.49	0
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	658	1981	2538	670	139	43	5	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5656.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1070	1950	821	104	18	2	.	.	.	.	3965
0.50-0.99	.	1061	2516	373	19	8	1	.	.	.	3978
1.00-1.49	.	3	715	397	75	1	1	.	.	.	1192
1.50-1.99	.	.	78	270	126	18	1	1	.	.	494
2.00-2.49	.	.	.	118	54	26	2	.	.	.	200
2.50-2.99	.	.	.	2	105	17	3	.	.	.	127
3.00-3.49	6	70	3	.	.	.	79
3.50-3.99	38	6	.	.	.	44
4.00-4.49	5	17	.	.	.	22
4.50-4.99	4	.	.	.	9
5.00-5.49	1	1	.	2
5.50-5.99	1	1	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1070	3014	4130	1264	403	185	38	7	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 9472.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1650	1992	375	119	18	1	.	.	.	.	4155
0.50-0.99	.	2844	2087	73	33	8	.	.	.	.	5045
1.00-1.49	.	1	1174	50	8	2	.	1	.	.	1236
1.50-1.99	.	.	351	271	17	2	1	.	.	.	642
2.00-2.49	.	.	.	170	25	11	.	1	.	.	207
2.50-2.99	.	.	.	17	32	10	1	.	.	.	60
3.00-3.49	10	19	.	.	.	.	29
3.50-3.99	10	1	.	.	.	11
4.00-4.49	2	.	.	.	.	2
4.50-4.99	2	2	.	.	4
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1650	4837	3987	700	143	65	5	6	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10665.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 10700.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M) = 4.0 MEAN TP(SEC) = 3.7 NO. OF CASES = 8411.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) ≈315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 3.6 NO. OF CASES = 5782

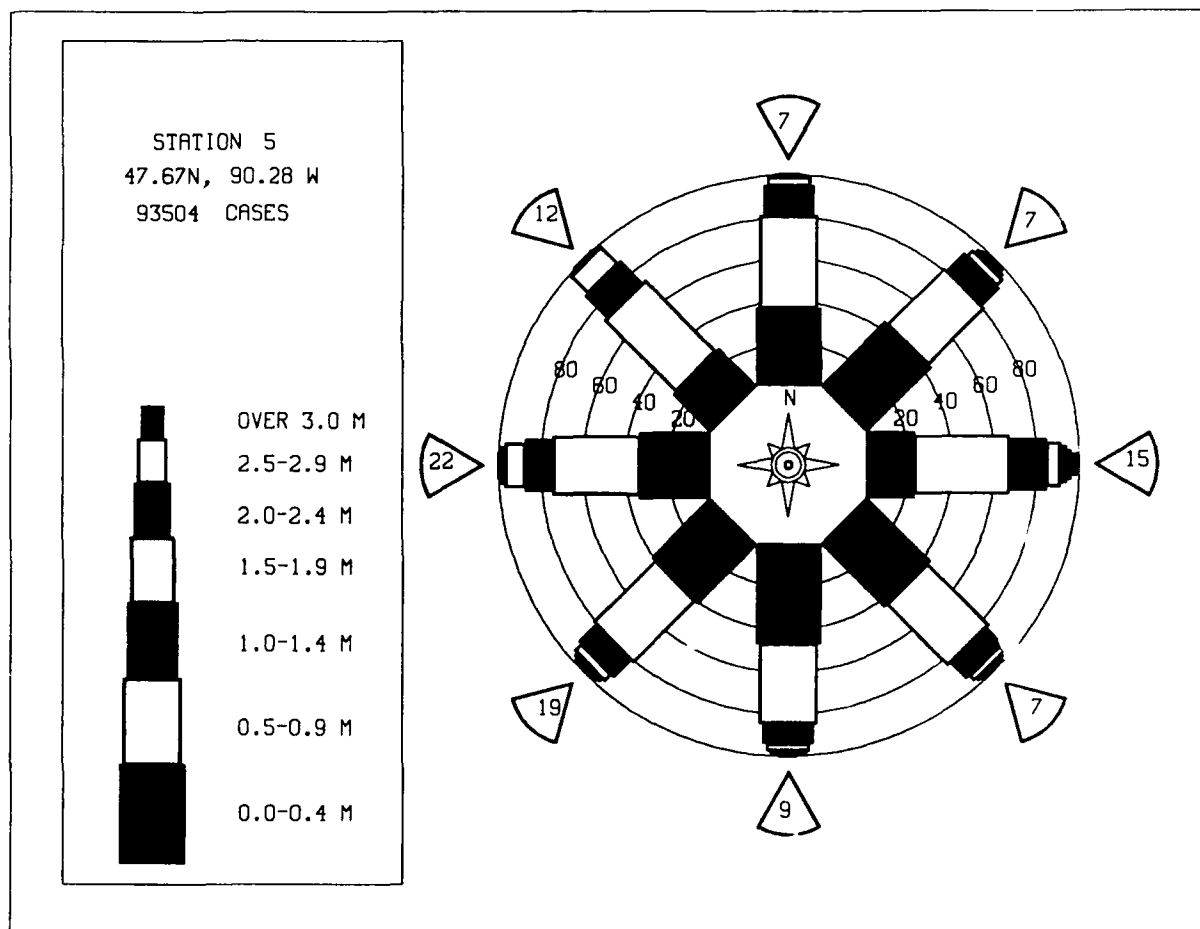
STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4043

STATION S05 47.67N 90.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER	
0.00-0.49	1090	1806	439	84	17	5	.	.	.	.	3441
0.50-0.99	.	1864	2094	187	36	18	2	.	.	.	4201
1.00-1.49	.	.	933	308	48	14	5	1	.	.	1309
1.50-1.99	.	.	297	264	70	20	4	2	.	.	657
2.00-2.49	.	.	.	119	33	26	4	3	.	.	185
2.50-2.99	.	.	.	12	42	17	6	3	1	.	81
3.00-3.49	5	27	4	4	.	.	40
3.50-3.99	12	4	3	2	.	21
4.00-4.49	1	7	3	2	.	13
4.50-4.99	1	3	2	1	7
5.00-5.49	2	2	.	4
5.50-5.99	1	.	1
6.00-6.49	1	.	1
6.50-6.99	1	1
7.00+	2	2
TOTAL	1090	3670	3763	974	251	140	37	24	11	4	

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.7 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S05 (47.67N 90.28W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.0	1.1	0.8	0.7	0.6	0.5	0.5	0.6	1.0	1.1	1.0	0.8
1957	0.9	0.9	0.7	0.8	0.8	0.6	0.4	0.5	0.6	0.6	1.1	1.0	0.7
1958	0.7	0.9	0.5	0.8	0.7	0.6	0.5	0.5	0.7	0.7	1.2	0.8	0.7
1959	0.8	0.9	0.8	0.7	0.9	0.5	0.5	0.5	0.8	0.8	1.0	0.8	0.8
1960	0.8	0.7	0.7	0.8	0.7	0.4	0.4	0.5	0.6	0.7	1.0	0.9	0.7
1961	0.7	0.8	0.9	0.7	0.6	0.5	0.3	0.3	0.6	0.7	0.8	0.8	0.7
1962	1.0	0.8	0.8	0.7	0.7	0.4	0.4	0.4	0.5	0.7	0.9	0.9	0.7
1963	0.9	0.9	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.6	0.9	1.0	0.7
1964	1.0	0.8	0.9	0.8	0.7	0.4	0.4	0.6	0.6	0.7	0.9	0.8	0.7
1965	1.1	1.1	1.1	0.8	0.6	0.6	0.4	0.4	0.6	0.9	1.4	1.3	0.8
1966	1.2	1.2	1.9	1.2	1.0	0.7	0.7	0.7	0.9	1.3	1.1	1.1	1.1
1967	1.3	1.1	1.4	1.0	1.0	0.9	0.6	0.7	0.8	1.3	1.1	1.1	1.1
1968	1.1	1.3	1.3	1.2	0.9	0.8	0.8	0.8	0.8	1.1	1.3	1.3	1.1
1969	1.3	0.8	0.8	0.8	0.7	0.6	0.5	0.6	0.6	0.9	0.8	0.8	0.8
1970	0.8	0.9	0.9	1.0	0.8	0.6	0.5	0.5	0.7	0.9	0.9	0.8	0.8
1971	0.9	1.0	0.9	0.8	0.7	0.5	0.4	0.4	0.6	0.9	0.9	0.8	0.8
1972	1.1	0.9	0.9	0.7	0.5	0.5	0.4	0.4	0.7	0.9	0.9	0.7	0.7
1973	0.9	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.6	0.8	1.0	0.8	0.7
1974	0.9	0.6	0.9	0.7	0.6	0.5	0.5	0.5	0.5	0.7	0.9	0.8	0.7
1975	1.1	1.1	1.1	0.6	0.5	0.5	0.5	0.5	0.6	0.9	1.0	0.8	0.7
1976	0.9	0.9	1.1	0.7	0.6	0.6	0.4	0.4	0.5	0.6	0.8	0.8	0.7
1977	0.9	1.1	1.3	0.5	0.5	0.4	0.4	0.4	0.7	0.7	0.9	0.8	0.7
1978	0.8	0.6	0.7	0.8	0.5	0.4	0.4	0.5	0.8	0.7	0.9	0.8	0.6
1979	0.7	0.7	0.8	0.7	0.5	0.5	0.3	0.4	0.6	0.6	0.8	0.8	0.6
1980	0.8	0.7	0.7	0.5	0.5	0.5	0.3	0.5	0.7	0.8	0.6	0.6	0.6
1981	0.7	0.8	0.7	0.4	0.4	0.5	0.4	0.4	0.7	0.8	0.7	0.7	0.7
1982	1.0	0.8	1.1	0.8	0.7	0.4	0.4	0.4	0.6	0.8	0.9	1.1	0.7
1983	0.9	0.8	1.2	0.7	0.6	0.4	0.4	0.4	0.6	0.7	1.2	1.0	0.7
1984	0.9	0.8	0.9	0.9	0.6	0.5	0.4	0.4	0.6	1.0	1.0	0.8	0.8
1985	1.0	0.7	0.7	0.7	0.6	0.6	0.4	0.5	0.6	0.8	0.8	0.8	0.7
1986	0.9	0.7	1.0	0.9	0.6	0.5	0.4	0.4	0.7	0.7	1.0	0.9	0.7
1987	0.7	0.8	1.1	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.8	0.7	0.6
MEAN	0.9	0.9	1.0	0.8	0.7	0.5	0.4	0.5	0.7	0.8	0.9	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S05 (47.67N 90.28W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.0	5.1	7.5	3.7	3.0	1.8	1.3	1.7	1.8	2.9	3.5	4.6	
1957	2.6	3.4	2.7	2.2	2.2	2.2	1.7	1.6	1.7	2.2	2.7	2.6	
1958	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1959	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1960	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1961	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1962	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1963	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1964	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1965	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1966	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1967	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1968	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1969	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1970	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1971	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1972	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1973	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1974	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1975	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1976	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1977	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1978	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1979	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1980	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1981	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1982	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1983	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1984	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1985	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1986	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	
1987	2.1	2.4	2.5	2.2	2.2	2.2	1.7	1.6	2.2	2.2	2.7	2.7	

32 YR. STATISTICS FOR WIS STATION S05

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	9.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	84.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66030418

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	448	863	210	54	16	9					1600
0.50-0.99		1132	244	141	69	27	9	2			1624
1.00-1.49			361	23	7	35	11	6	1		464
1.50-1.99			66	1	27	17	11	12	1		115
2.00-2.49					1	5	4	7	3	1	21
2.50-2.99				1				1	2	1	5
3.00-3.49								1		1	2
3.50-3.99										1	1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	448	1995	881	220	120	93	35	29	7	4	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 3596.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	470	632	186	41	16	8		1			1353
0.50-0.99		717	357	151	45	20	6	1			1297
1.00-1.49			133	97	70	35	8	4			347
1.50-1.99			53	9	24	31	8	5			130
2.00-2.49			5	4	1	13	10	14	1		48
2.50-2.99				2		1	2	10	2	2	19
3.00-3.49				1				5		2	8
3.50-3.99									2		2
4.00-4.49									2	1	3
4.50-4.99										1	1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	470	1349	734	305	156	108	34	39	7	6	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3015.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	608	799	253	54	11	4					1729
0.50-0.99		614	348	163	24	14					1363
1.00-1.49			116	130	66	26	4	1			343
1.50-1.99			17	29	37	27	4	2			116
2.00-2.49			1	3	10	26	9	13	2		22
2.50-2.99						7	5	12	4		28
3.00-3.49						2	1	6	3	1	17
3.50-3.99								5	2	1	7
4.00-4.49								2	1	2	3
4.50-4.99											0
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	608	1413	935	379	148	106	30	27	12	4	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3442.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	490	801	192	29	5	1					1518
0.50-0.99		585	935	132	10	2					1664
1.00-1.49			188	204	41	9	1				443
1.50-1.99			16	64	45	19	2				146
2.00-2.49				18	21	28	7	7			81
2.50-2.99					23	10	8	4			45
3.00-3.49					2	13	8	7	4		34
3.50-3.99						5	6	7	8	1	27
4.00-4.49						1	6		9		16
4.50-4.99								3	2		5
5.00-5.49									3		3
5.50-5.99								1	2	2	5
6.00-6.49									1	1	1
6.50-6.99									1	1	2
7.00+											2
TOTAL	490	1386	1331	447	147	88	38	29	30	6	

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3751.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 9239.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 4843.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3557

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.5 LARGEST HS(M) = 3.7 MEAN TP(SEC) = 3.5 NO. OF CASES = 4084

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	739	1506	457	42	10	1	.	.	.	.	2755
0.50-0.99	.	479	1312	98	7	4	.	.	.	.	1900
1.00-1.49	.	.	256	225	14	5	.	.	.	.	500
1.50-1.99	.	.	21	134	48	3	.	.	.	.	206
2.00-2.49	.	.	.	40	18	16	1	1	.	.	76
2.50-2.99	25	8	.	.	.	.	33
3.00-3.49	10	.	.	.	.	10
3.50-3.99	2	.	.	.	.	2
4.00-4.49	3	.	.	.	3
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	739	1985	2046	539	122	49	4	2	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 4.9		MEAN TP(SEC)= 3.7		NO. OF CASES= 5141.						

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	762	1691	726	49	10	1	.	.	.	.	3239
0.50-0.99	.	581	1514	227	9	4	.	.	.	.	2335
1.00-1.49	.	1	362	243	44	1	.	1	.	.	653
1.50-1.99	.	.	37	165	52	8	1	.	.	.	263
2.00-2.49	.	.	.	63	26	5	1	.	.	.	95
2.50-2.99	44	8	.	.	.	.	52
3.00-3.49	10	.	.	.	.	34
3.50-3.99	3	.	.	.	13
4.00-4.49	4
4.50-4.99	0
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	762	2273	2639	747	185	71	10	3	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 5.6		MEAN TP(SEC)= 3.8		NO. OF CASES= 6269.						

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1249	1998	972	134	20	1					4374
0.50-0.99	.	1696	1468	451	50	7	1	.	.	.	3673
1.00-1.49	.	2		545	96	7	2	.	.	.	980
1.50-1.99	.	.	73	203	87	29	1	1	.	.	394
2.00-2.49	.	.	2	86	40	39	4	.	.	.	171
2.50-2.99	.	.	.	3	81	18	2	.	.	.	104
3.00-3.49	5	49	2	.	.	.	56
3.50-3.99	19	.	.	.	.	30
4.00-4.49	3	7	.	.	.	10
4.50-4.99	1	5	.	.	6
5.00-5.49	1	1	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1249	3696	3060	1205	379	172	31	7	3	0	
MEAN HS(M) = 0.7	LARGEST HS(M)= 6.2		MEAN TP(SEC)= 3.8		NO. OF CASES= 9179.						

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2091	2831	402	132	26	11					5493
0.50-0.99	.	2548	342	86	25	10	1	.	.	.	3012
1.00-1.49	.	.	627	12	5	7	.	.	.	.	654
1.50-1.99	.	.	180	19	7	3	2	.	.	.	209
2.00-2.49	.	.	7	14	1	1	.	1	.	.	24
2.50-2.99	5	2	.	.	.	.	7
3.00-3.49	1	1	1	.	.	.	3
3.50-3.99	2	2	.	.	.	4
4.00-4.49	1	.	.	.	1
4.50-4.99	1	.	.	1
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2091	5379	1558	263	70	37	7	4	0	0	
MEAN HS(M) = 0.5	LARGEST HS(M)= 5.4		MEAN TP(SEC)= 3.1		NO. OF CASES= 8811.						

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	2353	2410	532	187	39	23	1	1	.	.	5546
0.50-0.99	.	2522	362	113	42	19	2	.	.	.	3060
1.00-1.49	.	.	1024	14	8	8	.	1	.	.	1055
1.50-1.99	.	.	210	.	1	2	1	.	.	.	214
2.00-2.49	.	.	12	10	.	1	.	1	.	.	24
2.50-2.99	1	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2353	4932	2140	324	90	53	4	3	1	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 9268.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1100	1540	345	101	23	9	1	.	.	.	3119
0.50-0.99	.	2491	752	87	29	22	1	.	.	.	3382
1.00-1.49	.	1	1005	4	14	6	5	1	.	.	1036
1.50-1.99	.	.	531	74	.	1	1	.	.	.	607
2.00-2.49	.	.	7	59	.	1	.	.	.	.	67
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	1
3.50-3.99	1	.	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1100	4032	2640	329	66	39	8	1	0	1	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 7694.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	597	979	260	56	16	13	.	.	.	.	1921
0.50-0.99	.	2314	1147	88	35	26	6	2	.	.	3618
1.00-1.49	.	.	937	6	16	9	2	1	.	.	971
1.50-1.99	.	.	668	90	4	1	4	.	.	.	767
2.00-2.49	.	.	.	59	.	2	.	.	.	.	61
2.50-2.99	.	.	.	7	.	.	.	1	.	.	8
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	597	3293	3012	306	72	51	12	4	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 6882.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

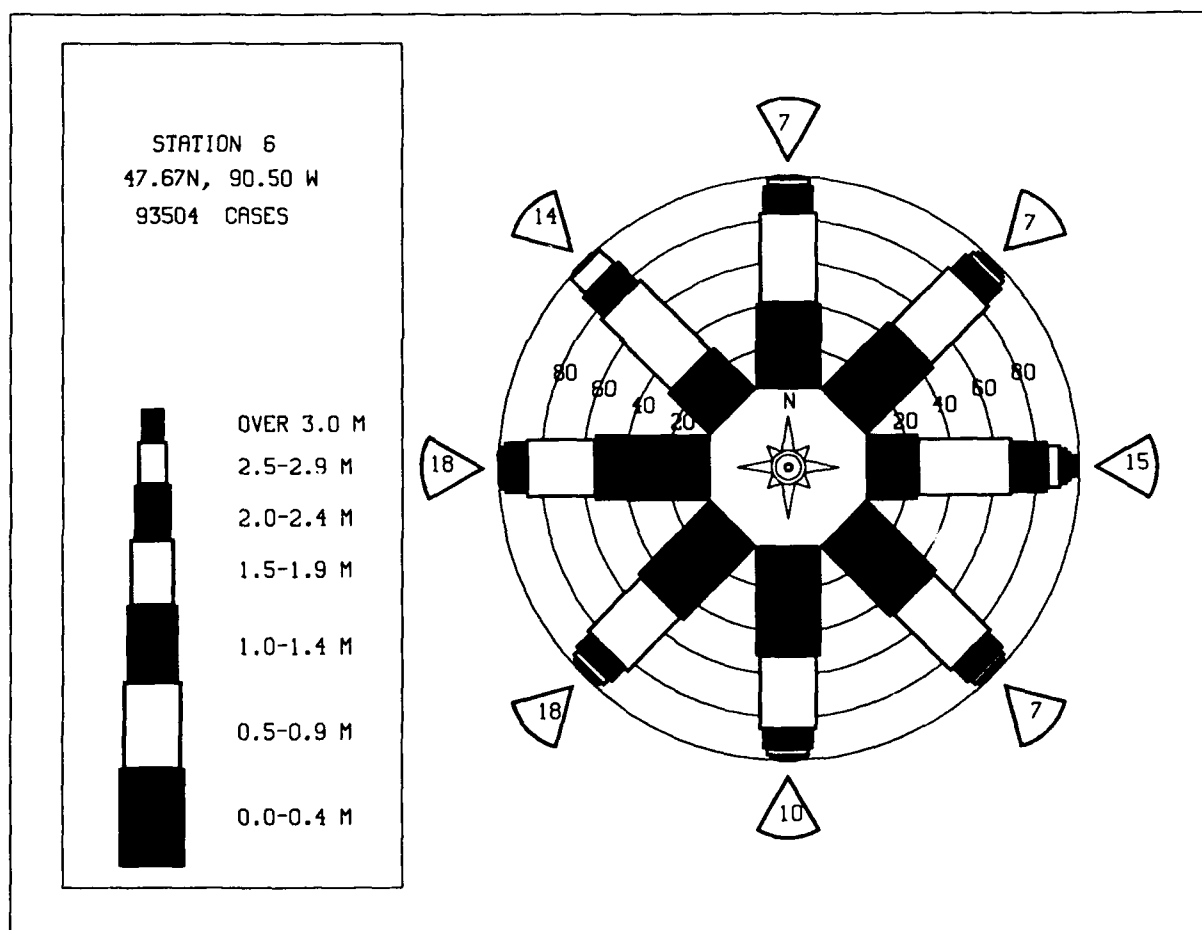
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	457	768	174	49	20	6	.	.	.	.	1474
0.50-0.99	.	1765	541	79	43	20	6	3	.	.	2457
1.00-1.49	.	.	666	14	22	17	3	4	.	.	726
1.50-1.99	.	.	332	36	1	7	2	2	1	.	381
2.00-2.49	.	.	1	9	.	1	.	1	.	.	12
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	457	2533	1714	187	86	51	11	10	1	1	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4733.

STATION S06 47.67N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1361	2133	560	104	24	9					4191
0.50-0.99		1989	1621	227	42	19	3				3901
1.00-1.49			768	288	57	18	4	2			1137
1.50-1.99			226	151	65	22	4	2			470
2.00-2.49			3	55	28	28	6	4			124
2.50-2.99				2	35	14	5	4			60
3.00-3.49					1	24	4	4	3		34
3.50-3.99						9	5	3	1		20
4.00-4.49							7	2	3		12
4.50-4.99								2	2		6
5.00-5.49								2	1		3
5.50-5.99									1	1	2
6.00-6.49									1	1	2
6.50-6.99										1	1
7.00+										5	2
TOTAL	1361	4122	3178	827	252	143	38	27	12	5	

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S06 (47.67N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.8	1.0	0.8	0.7	0.5	0.5	0.4	0.5	0.9	1.0	0.9	0.7
1957	0.0	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.6	0.0	0.9	0.8	0.7
1958	0.0	0.8	0.5	0.8	0.8	0.5	0.4	0.4	0.7	0.0	0.9	0.8	0.6
1959	0.7	0.8	0.7	0.6	0.8	0.5	0.4	0.4	0.7	0.0	0.8	1.1	0.7
1960	0.7	0.7	0.7	0.8	0.8	0.5	0.4	0.4	0.5	0.0	0.9	0.8	0.8
1961	0.6	0.7	0.9	0.7	0.5	0.5	0.3	0.3	0.6	0.0	0.8	0.0	0.6
1962	0.9	0.7	0.8	0.6	0.6	0.4	0.4	0.4	0.5	0.0	0.8	0.0	0.6
1963	0.8	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.0	0.0	0.8	0.9	0.6
1964	1.0	0.8	0.8	0.8	0.7	0.5	0.4	0.5	0.0	0.0	0.8	0.0	0.7
1965	0.9	1.0	0.8	0.7	0.6	0.5	0.4	0.4	0.6	0.0	1.2	1.1	0.7
1966	1.1	1.1	1.1	1.1	0.9	0.9	0.6	0.6	0.7	1.1	1.1	1.1	0.9
1967	1.1	0.9	1.1	0.9	0.9	0.8	0.5	0.6	0.7	1.1	0.9	1.1	0.9
1968	1.1	1.0	1.1	1.1	0.9	0.9	0.7	0.7	0.7	1.1	1.1	1.1	0.9
1969	1.1	1.1	0.7	0.0	0.8	0.6	0.4	0.5	0.9	0.8	0.8	0.0	0.7
1970	0.0	0.6	0.8	0.0	0.9	0.5	0.4	0.4	0.0	0.0	0.8	0.0	0.7
1971	0.0	0.9	0.0	0.0	0.7	0.4	0.3	0.4	0.0	0.0	0.9	0.0	0.6
1972	0.0	0.9	0.0	0.0	0.7	0.4	0.3	0.4	0.0	0.0	0.9	0.0	0.6
1973	0.0	0.8	0.0	0.0	0.6	0.5	0.4	0.5	0.0	0.0	0.8	0.0	0.6
1974	0.0	0.8	0.0	0.0	0.6	0.5	0.4	0.5	0.0	0.0	0.8	0.0	0.6
1975	0.1	0.8	1.1	0.0	0.4	0.5	0.3	0.4	0.0	0.0	0.7	0.0	0.6
1976	0.1	0.8	1.1	0.0	0.4	0.5	0.3	0.4	0.0	0.0	0.7	0.0	0.6
1977	0.0	0.6	0.0	0.0	0.5	0.5	0.4	0.4	0.0	0.0	0.8	1.1	0.7
1978	0.7	1.1	0.0	0.6	0.5	0.5	0.4	0.5	0.0	0.0	0.8	0.0	0.6
1979	0.7	0.6	0.0	0.8	0.0	0.5	0.3	0.4	0.0	0.0	0.7	0.0	0.6
1980	0.7	0.6	0.0	0.7	0.0	0.5	0.3	0.4	0.0	0.0	0.6	0.0	0.6
1981	0.6	0.8	0.0	0.7	0.0	0.5	0.3	0.4	0.0	0.0	0.8	0.0	0.6
1982	0.9	0.9	1.1	0.7	0.7	0.4	0.3	0.3	0.0	0.0	0.8	0.0	0.7
1983	0.8	0.8	1.1	0.0	0.6	0.5	0.4	0.3	0.0	0.0	0.6	1.1	0.7
1984	0.8	0.8	0.0	0.9	0.5	0.5	0.4	0.4	0.0	1.0	0.9	0.0	0.7
1985	0.8	0.7	1.2	0.0	0.6	0.5	0.3	0.4	0.0	0.7	0.7	0.0	0.7
1986	0.9	0.6	0.9	0.9	0.5	0.4	0.4	0.4	0.7	0.6	0.9	0.8	0.7
1987	0.6	0.8	1.1	0.5	0.5	0.3	0.4	0.4	0.4	0.6	0.8	0.6	0.6
MEAN	0.8	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S06 (47.67N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	4.0	4.7	7.5	3.7	3.0	1.9	1.1	1.5	1.7	2.9	3.3	4.6	
1957	2.5	3.4	2.6	4.2	2.8	1.9	1.4	1.6	1.7	1.5	2.5	2.6	
1958	2.8	3.0	1.4	5.9	1.6	2.2	1.4	1.2	2.2	2.1	3.4	2.1	
1959	1.8	4.3	2.3	2.1	2.5	1.3	1.8	1.3	2.7	2.0	2.6	7.5	
1960	2.1	3.5	3.0	2.6	2.0	1.4	1.4	1.6	1.7	2.2	6.6	3.5	
1961	1.9	2.9	3.1	2.0	1.8	1.3	1.4	1.4	2.1	2.0	3.8	2.1	
1962	2.6	3.7	4.9	1.8	2.0	1.1	1.5	1.3	1.7	4.9	3.4	2.6	
1963	1.9	3.3	3.0	2.1	2.3	3.0	1.1	1.5	1.6	2.2	2.6	5.3	
1964	4.6	3.8	2.7	2.7	3.3	1.8	0.9	2.6	2.3	1.9	3.9	3.1	
1965	3.5	5.2	4.9	3.0	2.3	1.5	0.8	1.0	2.2	3.4	9.2	7.0	
1966	4.3	4.1	9.3	6.6	2.8	2.2	2.0	2.9	2.1	4.0	4.7	4.1	
1967	7.5	3.3	5.2	3.1	4.0	3.5	1.8	1.5	2.4	5.5	3.9	4.5	
1968	3.5	3.1	3.3	4.2	2.7	2.2	3.8	2.0	1.8	3.3	5.1	5.1	
1969	5.7	3.2	1.9	2.9	2.3	3.1	1.1	2.1	1.9	2.4	2.5	4.2	
1970	1.6	2.0	5.6	4.3	2.7	1.8	1.3	1.2	2.8	3.2	3.0	3.8	
1971	2.5	4.0	3.7	2.7	3.6	1.5	1.6	1.2	1.9	5.3	4.3	3.1	
1972	4.0	4.5	3.4	2.4	1.9	1.2	1.0	1.2	2.6	3.0	2.7	5.6	
1973	3.1	2.6	3.7	2.1	1.9	1.5	1.2	0.8	1.7	3.4	2.9	2.8	
1974	4.4	2.3	4.3	3.2	2.1	1.3	1.4	1.4	1.4	2.6	3.5	4.7	
1975	5.9	2.7	6.5	2.6	1.2	1.2	1.4	2.7	2.6	4.5	4.1	2.8	
1976	3.3	3.0	4.3	1.5	1.3	1.9	1.2	1.3	2.1	3.1	1.7	3.0	
1977	1.9	6.4	5.1	1.6	1.5	1.3	1.5	1.0	4.7	3.1	4.5	7.8	
1978	2.0	1.5	2.8	2.4	1.2	1.8	1.1	1.3	3.7	2.8	3.1	4.2	
1979	1.6	3.5	2.9	4.2	2.1	1.8	1.2	1.2	2.6	2.4	3.5	2.8	
1980	2.6	2.7	3.6	1.4	1.6	1.5	1.1	2.1	3.2	2.7	2.5	3.7	
1981	1.6	2.1	3.0	3.2	1.3	2.2	1.1	1.3	3.4	3.0	3.0	2.3	
1982	5.7	2.4	4.1	3.9	1.9	1.4	1.3	1.0	2.6	3.1	5.1	3.4	
1983	3.4	4.2	6.4	2.9	1.4	1.5	1.5	1.3	1.5	2.1	5.0	4.4	
1984	3.7	3.8	3.4	3.6	1.7	2.3	1.2	1.4	2.4	4.7	3.0	2.8	
1985	3.7	3.3	9.3	3.1	1.7	1.5	1.1	2.2	1.9	2.4	2.2	2.3	
1986	4.2	3.6	3.1	3.4	1.9	1.5	1.2	1.2	3.5	3.8	6.2	3.3	
1987	2.0	5.3	5.6	1.7	2.7	0.9	1.7	0.9	1.5	2.1	3.4	2.8	

32 YR. STATISTICS FOR WIS STATION S06

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	9.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	83.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66030418

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	583	991	316	67	27	6					1990
0.50-0.99		983	309	214	89	47					1655
1.00-1.49			264	65	52	42	11				453
1.50-1.99			49	1	16	23	16	10			128
2.00-2.49						10	4	10			27
2.50-2.99						1	2	4			12
3.00-3.49									3	3	4
3.50-3.99									3	1	1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	583	1974	938	347	184	129	53	46	10	6	
MEAN HS(M) = 0.6	LARGEST HS(M)=		3.8	MEAN TP(SEC)=		3.8	NO. OF CASES=		4006.		

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	495	706	226	51	24	9	.	.	.	.	1511
0.50-0.99	.	380	436	122	42	26	3	.	.	.	1009
1.00-1.49	.	.	136	70	54	27	7	.	.	.	297
1.50-1.99	.	.	31	33	23	36	7	3	.	.	135
2.00-2.49	.	.	2	8	2	20	16	6	.	.	56
2.50-2.99	.	.	.	3	.	4	10	8	2	.	27
3.00-3.49	1	3	.	.	11
3.50-3.99	2	2	2	7
4.00-4.49	1	.	.	1
4.50-4.99	1	1
5.00-5.49	1	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	495	1086	831	287	145	122	44	28	13	4	2873
MEAN HS(M) = 0.6	LARGEST HS(M) =			5.0	MEAN TP(SEC) =		3.9	NO. OF CASES =		2873.	

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	532	725	267	72	22	6	1	.	.	.	1625
0.50-0.99	.	297	699	173	22	10	.	.	.	.	1202
1.00-1.49	.	.	234	97	45	20	2	.	.	.	398
1.50-1.99	.	.	18	55	40	26	.	1	.	.	144
2.00-2.49	.	.	.	25	12	25	8	6	1	.	77
2.50-2.99	.	.	.	1	.	13	9	8	.	.	31
3.00-3.49	1	6	8	4	.	19
3.50-3.99	2	4	1	2	10
4.00-4.49	1	1	2
4.50-4.99	4	.	4
5.00-5.49	i	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	i	1
7.00+	0
TOTAL	532	1022	1218	423	141	101	33	27	12	5	3302.

MEAN HS(M) = 0.7 LARGEST HS(M) = 6.5 MEAN TP(SEC) = 4.0 NO. OF CASES = 3302.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	474	748	209	37	6	2	.	.	.	.	1476
0.50-0.99	.	370	1006	166	10	5	.	.	.	.	1557
1.00-1.49	.	.	300	237	53	10	2	.	.	.	602
1.50-1.99	.	.	12	103	55	21	8	.	.	.	193
2.00-2.49	.	.	.	37	12	41	.	.	.	.	102
2.50-2.99	.	.	.	1	29	19	10	10	1	.	70
3.00-3.49	20	9	10	6	.	52
3.50-3.99	1	10	7	7	7	1	32
4.00-4.49	2	.	8	3	1	20
4.50-4.99	2	8	3	1	13
5.00-5.49	3	2	1	10
5.50-5.99	1	1	4
6.00-6.49	1	2	1	4
6.50-6.99	1	1	3
7.00+	8
TOTAL	474	1118	1527	581	173	130	47	49	25	23	3901.
MEAN HS(M) = 0.9	LARGEST HS(M) =			9.4	MEAN TP(SEC) =			4.2	NO. OF CASES =		3901.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 9036.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 5263.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4031

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 3944.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	827	1281	298	56	12	2	1	.	.	.	2477
0.50-0.99	.	445	1017	47	4	2	1	.	.	.	1516
1.00-1.49	.	.	285	66	10	2	1	.	.	.	364
1.50-1.99	.	.	19	121	8	2	1	.	.	.	151
2.00-2.49	.	.	.	49	8	.	.	1	.	.	58
2.50-2.99	.	.	.	1	4	.	.	1	.	.	6
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	827	1726	1619	340	47	10	4	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4287.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	767	1601	520	45	9	.	.	.	.	.	2942
0.50-0.99	.	549	1683	154	8	1	1	.	.	.	2396
1.00-1.49	.	1	420	270	23	4	1	.	.	.	719
1.50-1.99	.	.	23	187	49	6	1	1	.	.	266
2.00-2.49	.	.	.	57	37	4	1	.	.	.	99
2.50-2.99	41	9	1	.	.	.	51
3.00-3.49	1	22	.	1	.	.	24
3.50-3.99	7	.	.	.	.	7
4.00-4.49	1	.	.	.	.	2
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	767	2151	2646	713	168	54	6	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 6096.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1029	1990	928	89	11	2	1	.	.	.	4050
0.50-0.99	.	1248	2174	385	26	3	.	.	.	.	3836
1.00-1.49	.	1	619	559	83	7	.	.	.	.	1269
1.50-1.99	.	.	99	259	144	14	.	2	.	.	518
2.00-2.49	.	.	2	83	52	32	.	.	.	.	169
2.50-2.99	.	.	.	3	75	34	1	.	1	.	114
3.00-3.49	5	47	2	.	.	.	54
3.50-3.99	25	5	.	.	.	30
4.00-4.49	2	9	.	1	.	12
4.50-4.99	1	1	.	.	2
5.00-5.49	2	.	.	2
5.50-5.99	1	.	1
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	1029	3239	3822	1378	396	166	19	5	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 9418.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1628	2363	370	91	22	10	2	.	.	.	4484
0.50-0.99	.	2361	301	104	10	4	2	.	.	.	2782
1.00-1.49	.	.	608	29	3	3	1	.	.	.	644
1.50-1.99	.	.	175	34	9	3	1	.	.	.	222
2.00-2.49	.	.	6	14	2	4	.	.	.	.	27
2.50-2.99	3	.	1	.	.	8
3.00-3.49	2	4	.	.	.	.	6
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1628	4724	1460	272	52	33	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7655.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2337	2222	452	133	38	22	3		1		5208
0.50-0.99		1974	405	126	44	14	3	1			2567
1.00-1.49			736	20	16	9	4				785
1.50-1.99			166		1	6		1			174
2.00-2.49			5	3			1	2			11
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	2337	4196	1764	282	99	51	11	4	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 8187.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1535	1743	387	117	47	26	2				3857
0.50-0.99		2310	726	115	33	23	5	1			3213
1.00-1.49			776	16	10	9	4				813
1.50-1.99			376	47	4	3	2				432
2.00-2.49			1	22							23
2.50-2.99				1							1
3.00-3.49										1	1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1535	4053	2266	318	94	61	13	1	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 7808.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1024	1351	405	102	31	13					2926
0.50-0.99		2768	1206	116	40	36	7	1			4174
1.00-1.49			968	8	18	12	4	2			1012
1.50-1.99			518	66	4	5	1	1			595
2.00-2.49				22			1	2			25
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1024	4119	3097	316	93	66	13	6	0	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 8179.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

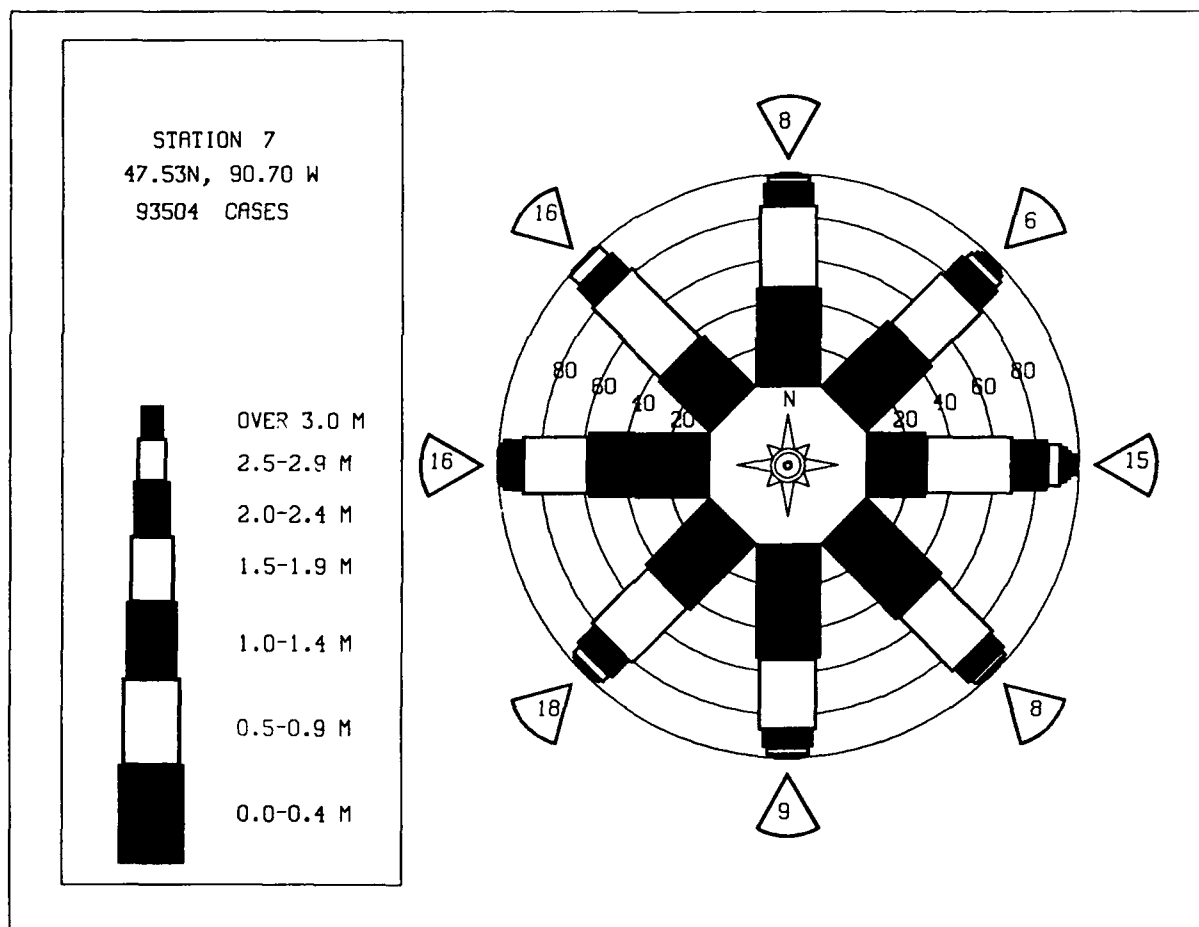
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	653	1036	276	94	20	10					2089
0.50-0.99		1978	521	124	56	42	10	1			2732
1.00-1.49			621	24	37	28	8	10			728
1.50-1.99			280	17	3	12	3	3	2		320
2.00-2.49			1	12			1	3			17
2.50-2.99								1	1		2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	653	3014	1699	271	116	92	22	18	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5518.

STATION S07 47.53N 90.70W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1472	2159	580	112	31	12	.	.	.	.	4366
0.50-0.99	.	1798	1681	233	42	23	5	.	.	.	3782
1.00-1.49	.	.	741	300	57	20	5	2	.	.	1125
1.50-1.99	.	.	182	162	69	23	4	3	.	.	443
2.00-2.49	.	.	1	48	28	29	6	3	.	.	115
2.50-2.99	.	.	.	1	30	16	6	4	1	.	58
3.00-3.49	2	22	4	4	2	.	34
3.50-3.99	9	4	2	2	.	17
4.00-4.49	1	5	3	2	.	11
4.50-4.99	1	2	2	.	5
5.00-5.49	2	.	1	3
5.50-5.99	2	.	2
6.00-6.49	1	.	1
6.50-6.99	1	1
7.00+	2	2
TOTAL	1472	3957	3185	856	259	155	40	25	12	4	

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.4 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S07 (47.53N 90.70W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.8	1.0	0.8	0.7	0.5	0.5	0.4	0.5	0.9	1.0	0.9	0.7
1957	0.6	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1958	0.6	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1959	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1960	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1961	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1962	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1963	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1964	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1965	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1966	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1967	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1968	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1969	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1970	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1971	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1972	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1973	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1974	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1975	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1976	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1977	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1978	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1979	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1980	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1981	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1982	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1983	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1984	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1985	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1986	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
1987	0.7	0.8	0.7	0.7	0.8	0.5	0.4	0.4	0.5	0.6	0.9	0.8	0.7
MEAN	0.8	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S07 (47.53N 90.70W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.6	4.1	8.5	3.5	3.1	2.0	1.1	1.6	1.6	3.1	3.6	4.9	
1957	2.8	2.5	3.3	4.3	2.8	1.9	1.3	1.4	1.8	1.7	2.6	2.5	
1958	2.6	3.8	1.6	5.8	1.5	1.8	1.3	1.2	1.8	2.0	2.5	2.6	
1959	1.7	4.2	2.4	1.8	3.1	1.4	1.5	1.2	2.5	2.1	2.5	8.1	
1960	2.0	4.0	3.6	2.4	2.2	1.3	1.2	1.7	1.6	2.3	6.8	3.2	
1961	1.9	2.5	2.9	2.4	1.7	1.6	1.4	1.1	2.0	1.8	3.7	1.8	
1962	2.9	3.7	4.9	1.9	2.7	1.4	1.3	1.3	1.8	4.2	3.2	2.9	
1963	1.8	3.7	2.7	2.4	1.9	2.8	1.1	1.5	1.8	2.3	2.0	4.9	
1964	4.6	3.6	2.8	2.5	3.5	2.2	0.9	2.9	2.6	1.9	4.0	3.4	
1965	3.7	5.2	4.7	2.8	2.1	1.6	0.8	0.9	2.5	3.1	8.1	6.4	
1966	3.6	4.2	7.6	6.1	2.5	2.2	1.4	2.4	1.8	3.8	4.2	3.5	
1967	7.1	2.6	4.7	2.9	3.5	3.0	1.5	1.4	2.1	4.7	3.4	4.0	
1968	3.1	2.6	3.4	4.1	2.4	2.0	3.5	1.7	1.7	2.5	5.0	5.1	
1969	4.6	2.7	2.4	2.8	2.0	2.1	1.2	2.3	1.6	2.2	3.9	2.2	
1970	1.6	2.1	4.5	4.1	2.8	1.8	1.2	1.1	3.2	2.7	2.8	3.5	
1971	2.5	4.8	3.7	2.7	2.8	1.6	1.3	1.0	1.7	4.7	4.3	2.5	
1972	4.1	4.3	3.0	2.1	2.3	1.5	0.9	1.2	2.4	2.2	2.5	4.6	
1973	3.4	2.8	3.5	2.0	2.1	1.5	1.0	0.8	1.9	2.2	2.9	2.7	
1974	3.4	2.4	4.4	3.4	2.2	1.3	1.4	1.3	1.5	2.2	3.1	4.4	
1975	6.0	2.4	6.8	3.0	1.2	1.2	1.7	2.6	2.3	3.3	4.0	2.8	
1976	3.1	3.4	4.6	2.0	1.5	1.9	1.1	1.3	1.9	3.3	1.6	3.0	
1977	1.8	6.6	5.2	1.5	1.5	1.1	1.4	1.0	4.3	3.4	4.6	7.4	
1978	2.7	1.4	2.7	2.7	1.4	1.5	1.2	1.2	3.7	2.4	2.8	3.8	
1979	1.7	3.5	2.9	4.3	2.1	1.5	0.9	1.2	2.5	2.1	3.4	3.0	
1980	2.4	2.8	3.7	1.7	1.9	1.8	0.9	1.6	2.6	2.4	2.8	3.4	
1981	1.5	2.0	3.3	3.1	1.0	1.6	0.9	1.2	2.7	2.6	2.9	1.9	
1982	5.6	2.7	4.6	3.8	2.1	1.4	1.0	1.0	2.1	3.2	4.5	3.3	
1983	3.1	4.2	6.0	2.5	1.6	1.6	1.7	1.4	1.5	1.7	4.7	3.9	
1984	3.5	3.1	3.7	3.6	2.4	2.1	1.0	1.2	2.6	4.5	2.9	2.3	
1985	3.5	3.9	9.4	3.5	1.7	1.5	1.1	1.9	1.8	2.1	2.7	2.6	
1986	4.0	3.3	3.4	3.5	2.0	1.3	1.6	1.5	3.1	3.6	6.0	3.3	
1987	2.4	5.4	6.2	1.8	2.8	0.9	1.5	0.9	1.2	2.1	2.8	2.9	

32 YR. STATISTICS FOR WIS STATION S07

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	9.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	67.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85030418

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	681	978	329	81	32	8					2109
0.50-0.99		1065	248	199	104	39	17	5			1677
1.00-1.49			276	31	36	44	13	12			412
1.50-1.99			37	1	11	19	16	12	4	1	101
2.00-2.49						4	6	9	4	1	24
2.50-2.99							1	4	3	2	10
3.00-3.49									1		4
3.50-3.99											1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99										1	1
7.00+											0
TOTAL	681	2043	890	312	183	114	53	42	16	5	

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 4071.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	562	730	248	55	20	12		3			1627
0.50-0.99		497	331	163	51	27	7	3			1079
1.00-1.49			80	88	77	40	10	2			297
1.50-1.99			11	12	11	47	16	6	1		104
2.00-2.49			1	3	2	18	22	14	3		63
2.50-2.99						3	6	7	3		19
3.00-3.49								5	6	4	15
3.50-3.99									1	2	3
4.00-4.49										1	1
4.50-4.99									1	1	2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	562	1227	671	321	161	147	61	37	15	8	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3017.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	602	756	283	69	24	7	1				1742
0.50-0.99		390	565	189	26	9	2				1181
1.00-1.49			135	134	67	21	4	1			362
1.50-1.99			9	35	33	33	6	2			121
2.00-2.49				6	5	20	10	15			46
2.50-2.99						5	9	12	4		31
3.00-3.49							8	6	1	1	16
3.50-3.99							1	1	4		6
4.00-4.49								2	4		6
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											1
TOTAL	602	1146	992	433	159	95	41	29	13	2	

MEAN HS(M) = 0.6 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3299.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	514	765	228	41	8	4					1560
0.50-0.99		428	890	183	11	4					1516
1.00-1.49			218	217	53	12	2				502
1.50-1.99			20	74	44	23	5	1			165
2.00-2.49				25	11	33	9	3			81
2.50-2.99				1	20	17	9	7	2		56
3.00-3.49					1	18	4	5	8		36
3.50-3.99						11	6	5	5	1	28
4.00-4.49							6	3	3	1	16
4.50-4.99							3	3	4	2	12
5.00-5.49								2	2	3	7
5.50-5.99										3	3
6.00-6.49									1	2	3
6.50-6.99									2	3	5
7.00+										4	4
TOTAL	514	1193	1356	541	148	122	42	32	27	19	

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 3756.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	745	1311	370	47	11	4	.	.	.	.	2488
0.50-0.99	.	926	2714	236	117	5	1	.	.	.	3896
1.00-1.49	.	.	725	860	117	12	.	.	.	.	1714
1.50-1.99	.	.	36	386	192	37	2	.	.	.	653
2.00-2.49	.	.	.	104	85	80	14	.	.	.	285
2.50-2.99	.	.	.	2	99	51	28	9	1	.	190
3.00-3.49	5	98	18	14	8	.	143
3.50-3.99	35	27	10	12	.	84
4.00-4.49	2	32	23	21	3	81
4.50-4.99	4	16	17	4	41
5.00-5.49	13	4	6	23
5.50-5.99	1	12	4	17
6.00-6.49	12	5	17
6.50-6.99	3	9	12
7.00+	21	21
TOTAL	745	2237	3845	1635	523	324	126	88	90	52	

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 9061.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	609	1078	247	37	8	4	.	.	.	.	1983
0.50-0.99	.	601	1634	118	9	5	.	.	.	.	2367
1.00-1.49	.	.	303	403	27	6	.	.	.	.	739
1.50-1.99	.	.	7	144	88	19	2	.	.	.	260
2.00-2.49	.	.	.	19	32	53	7	2	.	.	113
2.50-2.99	27	14	10	6	2	.	59
3.00-3.49	1	22	6	7	2	.	38
3.50-3.99	11	4	2	.	.	17
4.00-4.49	5	2	.	1	8
4.50-4.99	3	1	.	4
5.00-5.49	1	1
5.50-5.99	0
6.00-6.49	2	2
6.50-6.99	0
7.00+	0
TOTAL	609	1679	2191	721	192	134	34	20	7	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5243.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	772	1168	272	36	11	2	1	.	.	.	2261
0.50-0.99	.	396	1029	99	5	2	1	.	.	.	1532
1.00-1.49	.	.	143	186	25	2	.	.	.	.	356
1.50-1.99	.	.	3	63	37	16	1	.	.	.	120
2.00-2.49	.	.	.	7	18	13	2	.	.	.	40
2.50-2.99	8	6	.	2	.	.	16
3.00-3.49	4	1	1	.	.	6
3.50-3.99	1	4	1	1	.	7
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	772	1564	1447	391	104	46	10	4	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 4068.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	755	1360	310	26	11	2	.	.	.	.	2464
0.50-0.99	.	424	964	74	5	4	.	.	.	.	1471
1.00-1.49	.	.	208	102	20	3	.	.	.	.	333
1.50-1.99	.	.	10	86	16	4	2	.	.	.	116
2.00-2.49	.	.	.	17	9	8	.	.	.	.	36
2.50-2.99	8	3	1	.	.	.	11
3.00-3.49	1	3	.	.	.	.	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	755	1784	1492	305	70	27	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4158.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	879	1439	366	51	10	2	1	.	.	.	2748
0.50-0.99	.	448	1152	58	5	2	.	.	.	.	1665
1.00-1.49	.	.	326	74	9	3	1	.	.	.	413
1.50-1.99	.	.	22	132	5	1	1	.	.	.	161
2.00-2.49	.	.	.	48	7	.	.	1	.	.	56
2.50-2.99	6	.	.	.	1	.	7
3.00-3.49	2	.	.	2	.	4
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	879	1887	1866	363	42	11	3	1	3	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 3.9		MEAN TP (SEC) = 3.5		NO. OF CASES = 4736.						

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	803	1544	748	47	9	.	1	.	.	.	3151
0.50-0.99	.	601	1787	294	12	.	1	.	.	.	2595
1.00-1.49	.	.	621	262	60	5	1	.	.	.	949
1.50-1.99	.	.	67	204	103	13	1	.	1	.	389
2.00-2.49	.	.	.	77	67	20	2	1	.	.	167
2.50-2.99	.	.	.	2	18	34	.	1	.	.	55
3.00-3.49	.	.	.	1	2	5	1	1	.	.	10
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	1	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	803	2145	3223	887	271	78	7	4	1	0	
MEAN HS(M) = 0.7	LARGEST HS(M) = 4.1		MEAN TP(SEC) = 3.9		NO. OF CASES = 6946.						

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1045	1560	580	97	10	3	1	.	.	.	3296
0.50-0.99	.	1267	1073	219	26	3	.	.	.	.	2588
1.00-1.49	.	.	597	112	80	11	.	.	.	.	800
1.50-1.99	.	.	93	110	64	25	1	2	.	.	295
2.00-2.49	.	.	1	68	11	40	4	.	.	.	124
2.50-2.99	.	.	.	26	1	8	5	1	1	.	42
3.00-3.49	4	.	1	.	.	.	5
3.50-3.99	2	.	.	2
4.00-4.49	1	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1045	2827	2344	632	196	90	12	5	2	0	
MEAN HS(M) = 0.6	LARGEST HS(M) = 4.2		MEAN TP(SEC) = 3.6		NO. OF CASES = 6701.						

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1638	2007	290	87	27	12					4061
0.50-0.99	.	1793	227	68	8	3	2	.	.	.	2101
1.00-1.49	.	.	416	9	7	1	2	.	.	.	435
1.50-1.99	.	.	67	13	3	5	2	.	.	.	90
2.00-2.49	.	.	.	2		2	1	.	1	.	6
2.50-2.99	.	.	.	2	1	.	.	.	.	.	3
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1638	3800	1000	181	47	23	7	0	1	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 3.0		MEAN TP (SEC) = 3.0		NO. OF CASES = 6272.						

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) -270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 9073

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 8850

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 8637.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

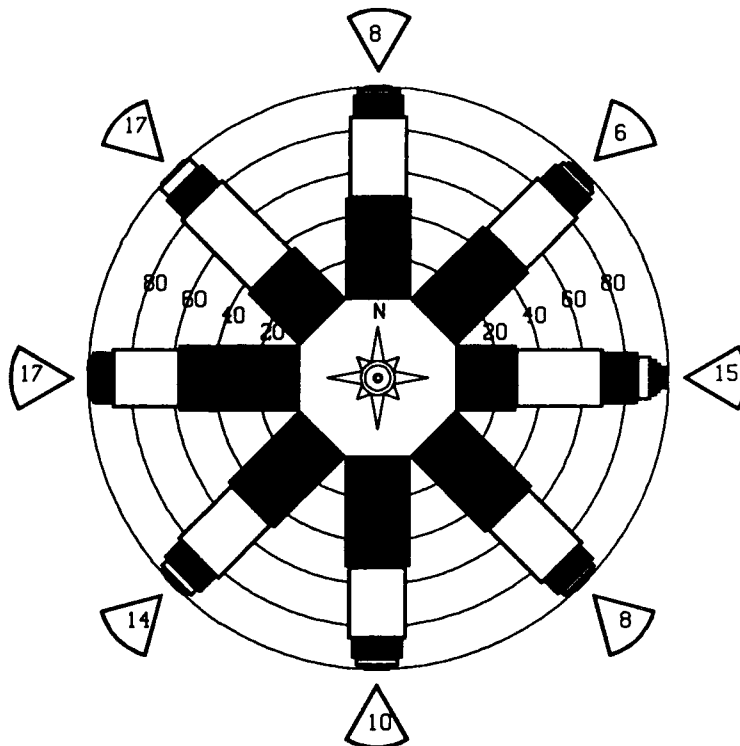
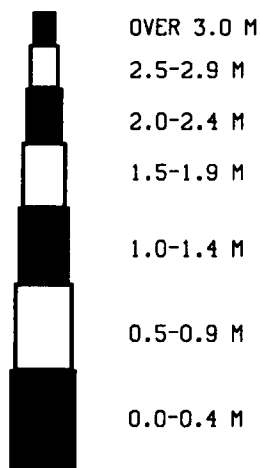
MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 5616.

STATION S08 47.53N 90.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1576	2144	579	113	32	14	1	.	.	.	4459
0.50-0.99	.	1900	1551	241	45	20	6	1	.	.	3764
1.00-1.49	.	.	758	254	67	22	5	2	.	.	1108
1.50-1.99	.	.	175	139	63	27	6	2	.	.	412
2.00-2.49	.	.	.	43	25	29	8	4	.	.	109
2.50-2.99	.	.	.	3	19	14	7	5	2	.	50
3.00-3.49	1	15	4	4	3	.	27
3.50-3.99	6	4	2	2	.	14
4.00-4.49	4	3	2	.	9
4.50-4.99	2	2	.	4
5.00-5.49	1	.	1	2
5.50-5.99	1
6.00-6.49	1	.	1
6.50-6.99	1	1
7.00+	2	2
TOTAL	1576	4044	3063	793	252	147	45	26	13	4	

MEAN HS(M)= 0.6 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.

STATION 8
47.53N, 90.92 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR												
WIS STATION S08 (47.53N 90.92W)												
MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	0.6	0.8	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1957	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1958	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1959	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1960	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1961	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1962	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1963	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1964	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1965	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1966	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1967	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1968	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1969	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1970	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1971	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1972	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1973	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1974	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1975	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1976	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1977	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1978	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1979	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1980	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1981	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1982	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1983	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1984	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1985	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1986	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
1987	0.6	0.8	0.8	0.7	0.7	0.5	0.4	0.4	0.5	0.9	1.0	0.9
MEAN	0.8	0.7	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	0.8

LARGEST HS(METERS) BY MONTH AND YEAR												
WIS STATION S08 (47.53N 90.92W)												
MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.6	4.0	8.6	3.4	3.1	2.0	1.1	1.6	1.6	3.2	3.3	4.9
1957	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1958	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1959	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1960	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1961	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1962	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1963	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1964	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1965	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1966	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1967	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1968	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1969	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1970	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1971	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1972	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1973	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1974	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1975	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1976	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1977	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1978	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1979	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1980	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1981	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1982	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1983	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1984	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1985	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1986	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4
1987	2.7	2.5	3.3	3.4	2.9	1.1	1.3	1.3	1.1	1.5	2.7	2.4

32 YR. STATISTICS FOR WIS STATION S08

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	8.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	73.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	937	1341	385	86	33	11	.	.	.	.	2793
0.50-0.99	.	894	462	218	70	62	13	.	.	.	1819
1.00-1.49	.	.	203	139	60	45	22	5	.	.	475
1.50-1.99	.	.	39	5	22	35	12	12	5	.	130
2.00-2.49	.	.	1	.	1	11	13	4	2	1	33
2.50-2.99	2	2	2	1	3	10
3.00-3.49	4	.	4
3.50-3.99	1	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	937	2336	1090	448	186	166	62	23	13	4	4937

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	531	808	212	32	14	1	.	.	.	.	1598
0.50-0.99	.	316	552	121	35	12	.	.	.	.	1036
1.00-1.49	.	.	109	97	32	19	3	1	.	.	261
1.50-1.99	.	.	9	44	27	31	2	3	.	.	116
2.00-2.49	.	.	.	25	7	17	10	6	.	.	66
2.50-2.99	.	.	.	4	8	5	14	5	.	.	36
3.00-3.49	1	.	4	5	2	.	12
3.50-3.99	4	.	1	5
4.00-4.49	1	.	1
4.50-4.99	1	1
5.00-5.49	1	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	531	1124	882	324	124	85	33	24	3	2	
MEAN HS (M) = 0.6	LARGEST HS (M) = 4.5		MEAN TP (SEC) = 3.8		NO. OF CASES = 2944.						

STATION S09 47 38N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	471	651	196	32	16	6	.	.	.	.	1372
0.50-0.99	.	264	717	113	21	13	.	.	.	.	1128
1.00-1.49	.	.	148	170	41	13	4	.	.	.	376
1.50-1.99	.	.	8	72	58	14	1	.	.	.	153
2.00-2.49	.	.	.	13	19	23	4	2	.	.	61
2.50-2.99	16	10	9	7	.	.	42
3.00-3.49	1	6	12	2	.	.	21
3.50-3.99	1	5	5	.	1	13
4.00-4.49	1	3	.	4
4.50-4.99	1	3	.	5
5.00-5.49	2	3	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	2	2
TOTAL	471	915	1069	400	172	86	35	18	9	6	
MEAN HS(M) = 0.7	LARGEST HS(M) = 8.8		MEAN TP(SEC) = 4.0		NO. OF CASES = 2991.						

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	456	658	177	27	6	3	.	.	.	.	1327
0.50-0.99	.	432	1056	100	17	11	.	.	.	.	1616
1.00-1.49	.	.	306	303	31	10	.	.	.	.	651
1.50-1.99	.	.	13	158	57	8	1	.	.	.	237
2.00-2.49	.	.	.	62	41	27	3	1	.	.	134
2.50-2.99	.	.	.	1	52	18	6	1	1	.	79
3.00-3.49	7	26	16	5	2	.	56
3.50-3.99	18	10	7	3	.	38
4.00-4.49	4	14	5	1	.	24
4.50-4.99	2	14	1	1	18
5.00-5.49	11	2	1	14
5.50-5.99	6	1	7
6.00-6.49	3	1	4
6.50-6.99	3
7.00+	3
TOTAL	456	1090	1552	651	211	123	53	44	26	7	3962
MEAN HS (M) = 0.9	LARGEST HS (M) = 9.3		MEAN TP (SEC) = 4.2		NO. OF CASES = 3962						

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	838	1457	274	58	14	3	.	.	.	.	2644
0.50-0.99	.	959	2707	111	2	4	.	.	.	.	3783
1.00-1.49	.	.	845	864	33	8	.	.	.	.	1750
1.50-1.99	.	.	34	467	197	11	1	.	.	.	710
2.00-2.49	.	.	.	121	86	66	5	2	.	.	280
2.50-2.99	.	.	.	3	137	60	16	3	.	.	219
3.00-3.49	4	103	25	16	.	.	148
3.50-3.99	55	36	10	1	.	102
4.00-4.49	1	42	11	.	1	55
4.50-4.99	9	18	.	.	27
5.00-5.49	33	1	.	34
5.50-5.99	7	11	1	19
6.00-6.49	2	.	7
6.50-6.99	2	4
7.00+	2	2
TOTAL	838	2416	3860	1624	473	311	134	100	22	6	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 9170.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	879	1312	224	38	13	3	.	.	.	.	2469
0.50-0.99	.	685	1818	52	8	5	.	.	.	.	2568
1.00-1.49	.	.	332	421	17	12	.	.	.	.	772
1.50-1.99	.	.	7	166	67	2	2	.	.	.	254
2.00-2.49	.	.	.	25	47	34	2	.	.	.	108
2.50-2.99	29	11	6	.	.	.	46
3.00-3.49	2	11	3	.	.	.	16
3.50-3.99	3	4	2	.	.	9
4.00-4.49	3	.	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	879	1997	2381	702	183	81	20	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 5852.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	890	1191	233	40	9	3	1	.	.	.	2367
0.50-0.99	.	448	1093	48	4	.	.	.	.	.	1593
1.00-1.49	.	.	160	192	16	1	.	.	.	.	369
1.50-1.99	.	.	2	60	27	2	.	.	.	.	91
2.00-2.49	.	.	.	12	7	7	.	.	.	.	26
2.50-2.99	9	4	1	1	.	.	15
3.00-3.49	4	2	.	.	.	6
3.50-3.99	1	.	1	.	1	3
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	890	1639	1488	352	72	22	6	2	0	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4191.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	697	1076	196	40	5	3	.	.	.	.	2017
0.50-0.99	.	432	818	26	6	.	.	.	.	.	1282
1.00-1.49	.	.	202	108	7	.	.	.	.	.	317
1.50-1.99	.	.	18	69	11	2	.	.	.	.	100
2.00-2.49	.	.	.	17	8	1	1	.	.	.	27
2.50-2.99	6	1	.	.	.	.	7
3.00-3.49	1	2	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	697	1508	1234	260	44	9	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 3517.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	760	1040	199	35	8	2	1	.	.	.	2045
0.50-0.99	.	447	905	26	1	.	.	.	.	.	1379
1.00-1.49	.	.	350	26	1	1	.	.	.	.	384
1.50-1.99	.	.	25	90	7	2	.	.	.	.	124
2.00-2.49	.	.	.	19	1	2	.	.	.	.	22
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	760	1487	1479	198	27	7	1	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3711.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	701	1264	291	25	2	1	.	.	.	.	2284
0.50-0.99	.	552	1627	62	7	.	.	.	.	.	2241
1.00-1.49	.	.	557	240	7	.	.	.	.	.	804
1.50-1.99	.	.	32	240	43	3	.	.	.	.	318
2.00-2.49	.	.	.	78	39	1	.	.	.	.	118
2.50-2.99	49	5	.	.	.	.	54
3.00-3.49	1	14	.	.	.	.	15
3.50-3.99	4	.	.	.	.	4
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	701	1816	2507	645	141	29	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 5469.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	885	1341	418	55	12	2	.	.	.	.	2713
0.50-0.99	.	775	2073	190	6	.	.	.	.	.	3044
1.00-1.49	.	.	641	485	37	2	.	.	.	.	1165
1.50-1.99	.	.	40	328	126	6	.	.	.	.	500
2.00-2.49	.	.	.	88	81	8	.	.	.	.	177
2.50-2.99	.	.	.	3	88	45	.	.	.	.	136
3.00-3.49	3	62	1	.	.	.	66
3.50-3.99	20	2	.	.	.	22
4.00-4.49	3	3	.	.	.	6
4.50-4.99	1	.	.	.	2
5.00-5.49	1	.	.	.	1
5.50-5.99	1	1	.	.	2
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	885	2116	3172	1149	353	148	7	3	1	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 7337.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1080	1105	156	40	7	3	1	.	.	.	2392
0.50-0.99	.	1448	1194	27	4	2	.	.	.	.	2675
1.00-1.49	.	.	619	39	9	1	.	.	.	.	668
1.50-1.99	.	.	165	117	12	7	1	.	.	.	294
2.00-2.49	.	.	.	54	11	7	.	.	.	.	73
2.50-2.99	.	.	.	6	6	2	.	.	1	.	15
3.00-3.49	2	.	.	.	.	2
3.50-3.99	1	.	1	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1080	2553	2134	283	49	17	3	0	2	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 5734.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1624	1420	196	49	18	6	1	.	.	.	3314
0.50-0.99	.	2208	1547	35	12	7	1	.	.	.	3810
1.00-1.49	.	.	1116	20	14	3	.	.	.	.	1150
1.50-1.99	.	.	348	235	8	1	.	.	.	.	532
2.00-2.49	.	.	.	117	.	.	.	.	.	.	117
2.50-2.99	.	.	.	8	1	.	.	.	.	.	9
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1624	3628	3207	464	50	17	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 8417.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1456	1820	180	82	20	8	.	.	.	.	3566
0.50-0.99	.	2912	1475	36	11	10	.	1	.	.	4445
1.00-1.49	.	.	1429	11	6	3	.	.	.	.	1449
1.50-1.99	.	.	537	260	3	2	1	.	.	.	803
2.00-2.49	.	.	1	112	.	.	.	.	.	.	113
2.50-2.99	.	.	.	12	1	.	.	1	.	.	14
3.00-3.49	0
3.50-3.99	1	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1456	4732	3622	513	41	23	1	2	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 9727.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1435	1735	336	99	50	20	.	.	.	.	3675
0.50-0.99	.	2888	1126	80	28	37	2	1	.	.	4162
1.00-1.49	.	.	1065	25	16	6	.	.	.	.	1114
1.50-1.99	.	.	441	38	3	2	2	.	.	.	487
2.00-2.49	.	.	1	17	.	2	1	.	.	.	21
2.50-2.99	1	.	.	1
3.00-3.49	0
3.50-3.99	1	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1435	4623	2969	259	97	68	7	2	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 8855.

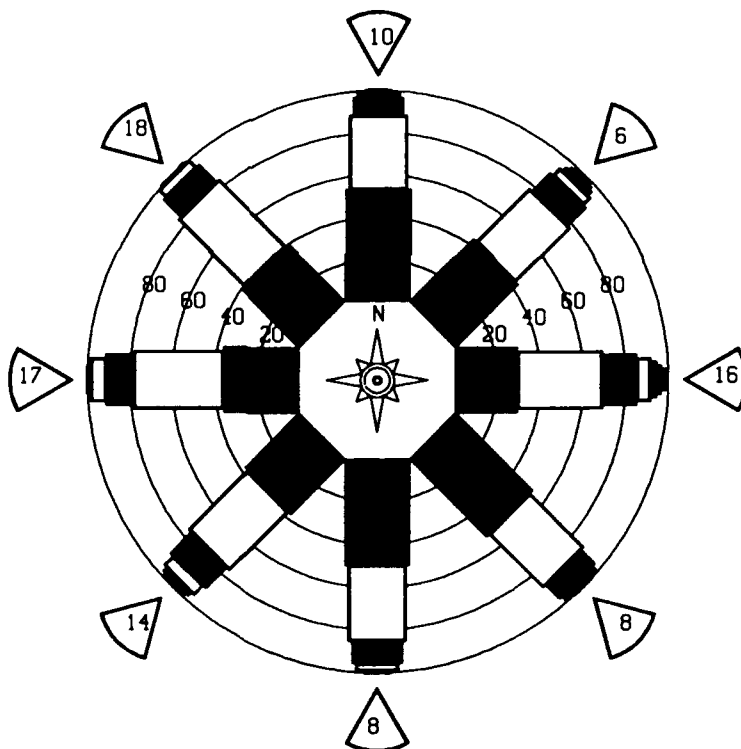
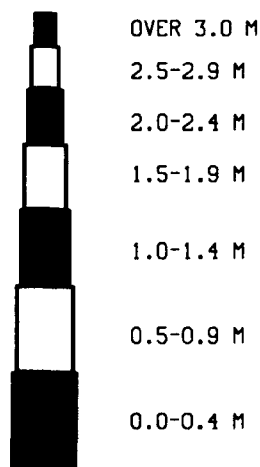
STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1239	1555	356	97	38	18	.	.	.	.	3303
0.50-0.99	.	2072	647	133	58	29	.	.	.	.	2978
1.00-1.49	.	.	520	57	27	19	.	.	.	.	641
1.50-1.99	.	.	164	5	6	17	.	.	.	.	202
2.00-2.49	.	.	1	.	.	2	2	.	1	.	13
2.50-2.99	2	.	.	3
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1239	3627	1688	296	129	116	21	21	4	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 6690.

STATION S09 47.38N 90.92W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1488	1978	403	84	27	9					3989
0.50-0.99		1783	1982	138	28	22					3955
1.00-1.49			861	320	36	13					1235
1.50-1.99			189	236	68	15					512
2.00-2.49				77	35	21					138
2.50-2.99				4	40	16					67
3.00-3.49					2	23					33
3.50-3.99						10					18
4.00-4.49											7
4.50-4.99											4
5.00-5.49											4
5.50-5.99											1
6.00-6.49											1
6.50-6.99											1
7.00+											0
TOTAL	1488	3761	3435	859	236	129	35	19	2	0	
MEAN HS(M)= 0.7 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.											

STATION 9
47.38N, 90.92 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S09 (47.38N 90.92W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.8	1.0	0.8	0.7	0.6	0.5	0.5	0.6	1.0	1.1	1.0	0.8
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.8	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.9	0.7

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S09 (47.38N 90.92W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	3.5	6.8	3.6	3.7	2.6	1.2	1.6	1.6	2.9	3.8	5.1	0.8
1957	2.9	2.4	3.7	4.3	2.9	2.0	1.7	1.2	2.1	1.7	2.8	2.4	0.7
1958	2.9	4.1	2.1	5.2	1.9	1.4	1.4	1.4	1.9	2.3	4.6	2.8	0.7
1959	2.1	3.9	2.4	2.1	2.6	1.8	1.4	1.3	2.3	2.4	2.7	6.6	0.7
1960	2.1	3.5	3.8	2.7	2.1	1.6	1.2	1.8	1.6	2.5	6.5	3.1	0.7
1961	2.0	2.5	2.7	2.2	2.4	1.7	1.6	0.8	1.5	1.7	3.4	2.1	0.7
1962	3.2	3.3	4.9	2.2	2.2	1.8	1.2	1.4	2.2	3.7	3.1	4.4	0.7
1963	2.0	4.0	2.4	2.2	1.9	2.6	1.2	1.6	1.9	2.2	2.1	4.3	0.7
1964	4.4	3.4	3.2	2.5	3.4	2.5	1.0	3.2	3.2	3.3	4.0	3.3	0.7
1965	3.4	4.9	4.5	2.3	1.9	1.6	1.1	1.1	2.4	3.9	7.0	5.5	0.7
1966	3.4	4.2	7.1	5.4	2.5	2.3	1.3	2.3	1.8	3.8	3.9	3.2	0.7
1967	3.3	2.4	4.2	2.5	3.5	3.0	1.5	1.4	2.1	3.9	3.0	4.4	0.7
1968	3.2	2.4	3.0	3.0	4.0	1.9	3.3	1.6	1.8	2.0	4.3	4.4	0.7
1969	3.5	2.6	2.5	3.3	2.3	2.1	1.3	2.2	1.5	2.4	2.4	3.3	0.7
1970	1.8	2.8	3.3	3.5	3.2	1.8	1.2	1.3	2.7	2.3	2.6	2.6	0.7
1971	2.4	4.9	3.9	2.6	2.6	1.7	1.2	1.1	1.4	4.0	4.1	2.7	0.7
1972	4.0	4.2	2.9	2.4	2.7	1.4	1.1	1.2	2.2	2.9	2.8	2.8	0.7
1973	3.7	2.2	3.1	1.9	2.1	1.3	1.4	0.9	1.1	2.5	3.1	2.8	0.7
1974	3.3	2.4	3.3	3.5	2.2	1.7	1.8	1.3	1.7	2.3	2.9	1.9	0.7
1975	4.9	2.7	6.0	3.6	1.4	1.2	1.4	2.2	2.1	3.4	3.7	3.3	0.7
1976	3.1	3.2	5.9	2.6	1.6	2.2	1.0	1.2	2.9	1.8	1.8	1.0	0.7
1977	2.0	6.0	5.3	2.5	1.5	1.1	1.6	1.1	4.0	3.5	4.4	5.0	0.7
1978	2.3	1.4	2.6	2.3	1.7	1.6	1.2	1.3	3.8	2.4	2.7	6.1	0.7
1979	1.8	3.5	3.0	3.7	2.1	1.2	1.1	1.3	2.2	2.0	3.3	2.2	0.7
1980	2.8	3.4	1.5	1.9	1.9	1.9	1.1	1.3	2.2	2.8	2.8	2.8	0.7
1981	1.6	2.1	3.3	2.8	1.4	1.9	1.0	1.2	2.7	2.3	3.3	1.1	0.7
1982	3.5	3.0	3.7	1.7	1.7	1.8	1.3	1.4	2.2	3.4	3.9	2.4	0.7
1983	2.9	4.0	5.2	2.5	2.0	1.7	1.3	1.4	1.8	1.8	5.0	3.2	0.7
1984	3.2	2.8	3.9	3.5	2.1	2.1	1.4	1.2	3.3	2.0	2.6	4.4	0.7
1985	3.9	4.5	9.3	2.9	1.8	1.9	1.0	1.6	0.0	2.4	3.6	9.9	0.7
1986	4.0	3.2	3.5	4.0	2.2	1.4	1.8	1.3	3.1	3.1	3.6	4.4	0.7
1987	2.4	5.1	5.2	1.6	3.2	1.3	1.4	1.2	1.2	2.6	2.9	3.2	0.6

32 YR. STATISTICS FOR WIS STATION S09

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	9.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85030421

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1525	1921	504	120	41	29	19	2	.	.	4140
0.50-0.99	.	1518	389	233	103	56	22	4	.	.	2320
1.00-1.49	.	.	266	81	68	43	22	7	.	.	487
1.50-1.99	.	.	26	4	16	35	22	10	4	1	118
2.00-2.49	1	9	9	6	2	3	32
2.50-2.99	1	2	1	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1525	3439	1185	438	229	172	73	29	11	4	0
TOTAL	1525	3439	1185	438	229	172	73	29	11	4	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6658.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	614	866	221	40	17	3	.	.	.	.	1761
0.50-0.99	.	402	489	129	26	19	4	.	.	.	1069
1.00-1.49	.	.	58	149	58	32	1	1	.	.	299
1.50-1.99	.	.	6	32	37	33	9	3	1	.	121
2.00-2.49	.	.	.	1	17	18	20	10	1	.	67
2.50-2.99	2	8	10	7	1	2	30
3.00-3.49	2	7	3	1	13
3.50-3.99	2	1	3	4
4.00-4.49	1	.	3
4.50-4.99	1	2	2
5.00-5.49	0
5.50-5.99	1	1
6.00-6.49	1	1
6.50-6.99	0
7.00+	614	1268	774	351	157	113	46	30	8	10	0
TOTAL	614	1268	774	351	157	113	46	30	8	10	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3166.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	449	533	175	31	19	5	.	.	.	.	1212
0.50-0.99	.	266	412	108	12	10	.	.	.	.	808
1.00-1.49	.	.	82	134	38	11	5	.	.	.	270
1.50-1.99	.	.	3	21	31	11	1	1	.	.	68
2.00-2.49	.	.	.	7	7	7	5	2	.	.	28
2.50-2.99	1	4	12	2	.	.	19
3.00-3.49	2	1	1	1	1	5
3.50-3.99	2	2	.	.	5
4.00-4.49	2	2	4
4.50-4.99	1	.	1
5.00-5.49	0
5.50-5.99	1	1
6.00-6.49	0
6.50-6.99	0
7.00+	449	799	672	301	108	50	26	8	4	4	0
TOTAL	449	799	672	301	108	50	26	8	4	4	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 2276.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	468	593	159	27	11	5	.	.	.	.	1263
0.50-0.99	.	503	832	100	23	18	2	.	.	.	1478
1.00-1.49	.	.	270	225	34	7	.	.	.	.	536
1.50-1.99	.	.	14	94	53	8	1	.	.	.	170
2.00-2.49	.	.	.	47	38	25	5	1	.	.	116
2.50-2.99	33	10	7	4	.	.	54
3.00-3.49	6	16	8	3	1	.	34
3.50-3.99	16	6	4	2	2	30
4.00-4.49	2	.	4	.	.	17
4.50-4.99	5	9	2	.	16
5.00-5.49	2	3	.	8
5.50-5.99	2	1	.	3
6.00-6.49	3	.	3
6.50-6.99	5	.	5
7.00+	468	1096	1275	493	198	107	42	35	17	4	2
TOTAL	468	1096	1275	493	198	107	42	35	17	4	2

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3510.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	913	1454	283	65	12	7	.	.	.	.	2734
0.50-0.99	.	998	2767	127	9	5	.	.	.	.	3906
1.00-1.49	.	.	916	902	33	5	1	.	.	.	1857
1.50-1.99	.	.	45	568	199	9	2	.	.	.	823
2.00-2.49	.	.	.	164	117	70	3	1	.	.	355
2.50-2.99	.	.	.	3	152	63	28	2	.	.	248
3.00-3.49	10	116	31	12	.	.	169
3.50-3.99	57	29	11	2	.	99
4.00-4.49	5	39	20	1	.	65
4.50-4.99	11	18	2	.	31
5.00-5.49	33	1	1	35
5.50-5.99	8	16	.	24
6.00-6.49	14	.	14
6.50-6.99	4	1	5
7.00+	2	4	6
TOTAL	913	2452	4011	1829	532	337	144	105	42	6	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 9721.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1004	1377	201	24	13	7	.	.	.	.	2626
0.50-0.99	.	745	1934	67	1	5	.	.	.	.	2752
1.00-1.49	.	.	398	433	26	5	.	.	.	.	862
1.50-1.99	.	.	12	194	87	16	.	.	.	.	309
2.00-2.49	.	.	.	37	34	26	4	.	.	.	101
2.50-2.99	31	16	7	2	.	.	56
3.00-3.49	3	18	4	1	.	1	27
3.50-3.99	5	6	.	.	.	11
4.00-4.49	1	.	.	.	1
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1004	2122	2545	755	195	98	22	4	0	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6320.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	896	1194	240	38	14	5	.	.	.	.	2387
0.50-0.99	.	500	1111	65	8	1	.	.	.	.	1685
1.00-1.49	.	.	197	240	12	1	.	.	.	.	450
1.50-1.99	.	.	2	82	31	4	.	.	.	.	119
2.00-2.49	.	.	.	9	9	8	.	.	.	.	26
2.50-2.99	13	3	1	.	.	.	17
3.00-3.49	4	.	.	.	.	4
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	1
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	896	1694	1550	434	87	27	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 4397.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	733	1162	161	26	4	.	.	.	.	.	2086
0.50-0.99	.	463	940	48	5	.	.	.	.	.	1456
1.00-1.49	.	.	218	82	7	.	.	.	.	.	307
1.50-1.99	.	.	9	85	9	1	1	.	.	.	105
2.00-2.49	.	.	.	13	6	2	.	.	.	.	21
2.50-2.99	8	1	.	.	.	.	9
3.00-3.49	2	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	733	1625	1328	254	39	8	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3737.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	834	1316	225	37	6	3	.	.	.	.	2421
0.50-0.99	.	594	1383	47	.	.	.	.	.	.	2024
1.00-1.49	.	.	545	114	8	.	.	.	.	.	667
1.50-1.99	.	.	21	217	12	1	.	.	.	.	251
2.00-2.49	.	.	.	86	9	2	.	.	.	.	97
2.50-2.99	10	.	.	1	.	.	11
3.00-3.49	1	.	.	.	.	1	2
3.50-3.99	3	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	834	1910	2174	501	46	9	0	1	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 5129.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	673	1224	413	38	6	.	.	.	.	.	2354
0.50-0.99	.	1063	1414	342	3	.	.	.	.	.	2822
1.00-1.49	.	.	285	607	146	3	.	.	.	.	1041
1.50-1.99	.	.	31	179	162	21	.	.	.	.	393
2.00-2.49	.	.	.	48	93	40	.	.	.	.	181
2.50-2.99	14	10	.	.	.	.	24
3.00-3.49	1	.	.	.	.	.	2
3.50-3.99	1	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	673	2287	2143	1214	425	75	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 6385.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	920	1235	294	50	11	3	.	.	.	.	2513
0.50-0.99	.	1732	482	236	22	1	.	.	.	.	2473
1.00-1.49	.	.	232	108	74	4	.	.	.	.	418
1.50-1.99	.	.	54	19	48	28	1	.	.	.	150
2.00-2.49	.	.	4	2	4	25	4	.	.	.	39
2.50-2.99	.	.	.	1	.	3	2	1	.	.	7
3.00-3.49	1	1	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	920	2967	1066	416	159	64	8	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 5247.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1198	1302	136	32	14	6	1	.	.	.	2689
0.50-0.99	.	1455	168	35	4	3	.	.	.	.	1665
1.00-1.49	.	.	283	17	5	1	.	.	.	.	306
1.50-1.99	.	.	44	1	6	2	.	.	.	.	53
2.00-2.49	.	.	2	.	.	1	.	.	.	.	3
2.50-2.99	1	.	1
3.00-3.49	1	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1198	2757	633	85	29	13	1	0	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 4420.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1888	1899	224	64	22	13	1				4111
0.50-0.99		2197	273	44	13	3	1	1			2532
1.00-1.49			706	20	13	3					742
1.50-1.99			108	1	3	2	2				116
2.00-2.49			1					1	1		3
2.50-2.99											0
3.00-3.49								1	1		2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1888	4096	1312	129	51	21	4	3	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 7028.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1563	1921	178	57	13	12		1			3745
0.50-0.99		2920	740	38	9	9					3716
1.00-1.49			1045	17	8	2					1072
1.50-1.99			267	19	3	2	1				292
2.00-2.49			4	10							14
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1563	4841	2234	141	33	25	1	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 8275.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1483	1726	269	97	53	18	1				3647
0.50-0.99		3265	1457	67	17	20	4	2			4832
1.00-1.49			1130	27	13	4	2				1176
1.50-1.99			513	42	2	8	1				566
2.00-2.49				19		1					20
2.50-2.99				1		1					2
3.00-3.49								1			1
3.50-3.99									1		1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1483	4991	3369	253	85	52	8	3	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 9588.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1597	1757	363	106	52	28	1				3904
0.50-0.99		2388	579	110	59	60	9	2			3207
1.00-1.49			709	33	23	18	4	12	1		800
1.50-1.99			187	17	6	12	5	5	1		233
2.00-2.49				9		2	3	4	1		19
2.50-2.99								1	1		2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1597	4145	1838	275	140	120	22	24	4	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 7647.

STATION S10 47.38N 91.13W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

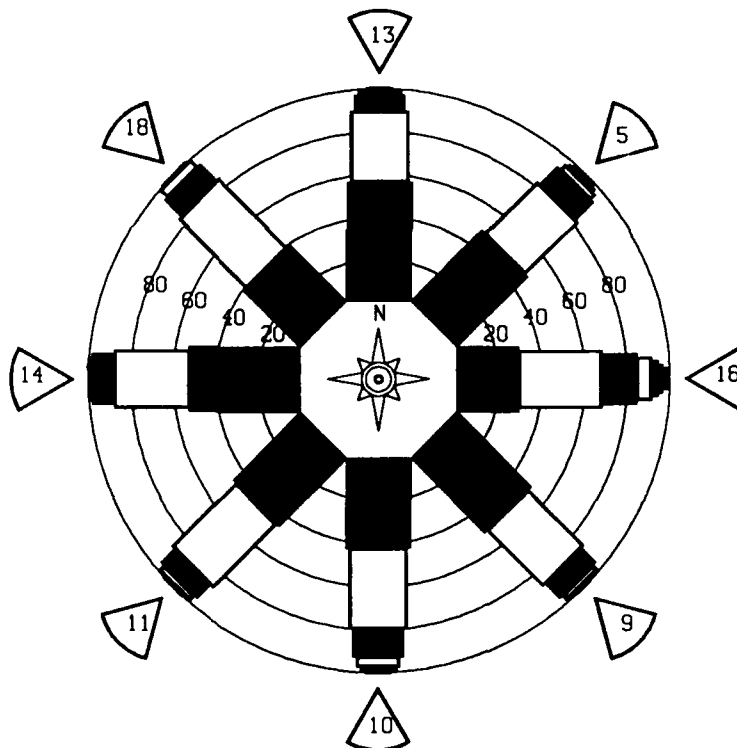
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1676	2148	405	85	31	15	.	.	.	.	4360
0.50-0.99	.	2101	1537	180	32	21	4	.	.	.	3875
1.00-1.49	.	.	734	319	57	14	3	2	.	.	1129
1.50-1.99	.	.	134	158	71	19	4	2	.	.	388
2.00-2.49	.	.	1	45	33	24	5	2	.	.	110
2.50-2.99	26	12	7	2	.	.	47
3.00-3.49	2	15	4	3	.	.	24
3.50-3.99	8	4	1	.	.	13
4.00-4.49	4	2	.	.	6
4.50-4.99	1	2	.	.	3
5.00-5.49	3	.	.	3
5.50-5.99	1	1	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	1676	4249	2811	787	252	128	36	20	2	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.

STATION 10
 47.38N, 91.13 W
 93504 CASES



OVER 3.0 M
 2.5-2.9 M
 2.0-2.4 M
 1.5-1.9 M
 1.0-1.4 M
 0.5-0.9 M
 0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S10 (47.38N 91.13W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.7	1.0	0.8	0.7	0.5	0.5	0.5	0.5	0.9	1.0	0.9	0.7
1957	0.8	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.4	0.6	0.9	0.7	0.7
1958	0.6	0.8	0.5	0.8	0.6	0.5	0.4	0.4	0.6	0.7	1.1	0.7	0.6
1959	0.8	0.7	0.7	0.6	0.7	0.5	0.4	0.4	0.6	0.7	0.8	1.1	0.7
1960	0.7	0.7	0.7	0.8	0.6	0.4	0.4	0.4	0.6	0.7	0.9	0.7	0.6
1961	0.7	0.7	0.9	0.6	0.6	0.5	0.3	0.3	0.5	0.6	0.6	0.6	0.6
1962	0.8	0.9	0.9	0.7	0.6	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.7
1963	0.7	0.8	0.8	0.6	0.5	0.3	0.3	0.4	0.6	0.6	0.8	0.9	0.6
1964	0.9	0.7	0.9	0.8	0.7	0.4	0.4	0.6	0.6	0.6	0.8	0.7	0.7
1965	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.6	0.7	0.9	1.1	0.7
1966	0.9	0.9	0.5	0.9	0.7	0.5	0.4	0.5	0.6	0.8	0.8	0.8	0.8
1967	1.1	0.8	0.9	0.7	0.7	0.5	0.4	0.5	0.9	0.7	1.1	0.9	0.7
1968	0.9	0.9	0.9	0.9	0.7	0.6	0.5	0.5	0.7	0.9	0.9	0.9	0.7
1969	1.0	0.6	0.6	0.7	0.6	0.5	0.4	0.5	0.7	0.7	0.7	0.7	0.6
1970	0.6	0.8	0.7	0.9	0.9	0.6	0.5	0.4	0.6	0.6	0.7	0.8	0.7
1971	0.8	1.0	0.8	0.8	0.6	0.5	0.4	0.3	0.7	0.7	0.8	0.6	0.6
1972	0.9	0.7	0.9	0.6	0.5	0.4	0.3	0.4	0.5	0.7	0.6	0.7	0.6
1973	0.7	0.7	0.6	0.6	0.6	0.5	0.3	0.3	0.7	0.7	0.8	0.7	0.6
1974	0.7	0.6	0.9	0.6	0.6	0.4	0.4	0.4	0.6	0.6	0.9	0.8	0.6
1975	0.9	0.7	0.8	0.8	0.6	0.5	0.5	0.5	0.8	0.8	0.9	0.7	0.7
1976	0.9	0.8	1.1	0.7	0.5	0.6	0.3	0.3	0.4	0.6	0.9	0.6	0.6
1977	0.6	0.6	2.2	0.5	0.5	0.4	0.4	0.4	0.6	0.7	1.1	0.6	0.7
1978	0.7	0.5	0.5	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.6
1979	0.6	0.5	0.5	0.7	0.5	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.6
1980	0.8	0.6	0.7	0.5	0.5	0.5	0.3	0.4	0.6	0.7	0.6	0.8	0.6
1981	0.6	0.7	0.7	0.6	0.5	0.5	0.3	0.4	0.6	0.7	0.6	0.8	0.6
1982	0.9	0.7	1.1	0.7	0.7	0.4	0.3	0.3	0.5	0.7	0.6	0.6	0.7
1983	0.8	0.6	2.0	0.6	0.6	0.5	0.4	0.4	0.6	0.6	1.1	0.8	0.7
1984	0.7	0.7	0.9	0.8	0.7	0.5	0.3	0.4	0.6	0.9	0.8	0.8	0.7
1985	0.8	0.7	0.8	0.6	0.5	0.4	0.3	0.4	0.6	0.6	0.7	0.8	0.6
1986	0.8	0.6	0.8	0.9	0.6	0.4	0.4	0.4	0.6	0.5	0.8	0.7	0.6
1987	0.6	0.8	1.2	0.5	0.6	0.3	0.4	0.3	0.4	0.6	0.7	0.7	0.6
MEAN	0.8	0.7	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S10 (47.38N 91.13W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.0	3.6	7.0	3.6	3.8	2.7	1.2	1.8	1.1	3.1	3.4	5.0	
1957	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1958	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1959	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1960	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1961	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1962	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1963	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1964	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1965	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1966	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1967	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1968	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1969	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1970	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1971	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1972	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1973	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1974	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1975	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1976	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1977	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1978	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1979	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1980	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1981	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1982	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1983	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1984	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1985	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1986	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	
1987	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	

32 YR. STATISTICS FOR WIS STATION S10

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67010703

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1496	1270	375	82	33	12					3268
0.50-0.99		2029	1386	234	83	65					3808
1.00-1.49			594	85	79	44	8				824
1.50-1.99			166	108	21	37	11				352
2.00-2.49			2	35	2	19	13				84
2.50-2.99				2		2	7				21
3.00-3.49											3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1496	3299	2523	546	220	179	55	33	12	4	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 7838.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	453	649	131	36	9	1					1279
0.50-0.99		603	667	128	32	21					1451
1.00-1.49			119	105	50	19	6	1			300
1.50-1.99			29	58	33	36	3	2			161
2.00-2.49			1	23	25	18	12	5	1		85
2.50-2.99				1	18	6	19	6	1		51
3.00-3.49					5	6		8	3		22
3.50-3.99						4		6	2		12
4.00-4.49										1	1
4.50-4.99									1	2	3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	453	1252	947	351	172	111	40	28	8	3	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3161.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	386	455	147	17	17	4					1026
0.50-0.99		241	575	88	19	9					932
1.00-1.49			132	160	31	12	3				338
1.50-1.99			3	73	35	21	2				134
2.00-2.49				12	22	22	5	1			62
2.50-2.99				1	13	8	3	4			29
3.00-3.49					2		10	5	1		26
3.50-3.99						3	4	2			9
4.00-4.49							2	6	1		9
4.50-4.99								2	3		5
5.00-5.49										3	3
5.50-5.99											0
6.00-6.49									2		2
6.50-6.99									1	3	4
7.00+											0
TOTAL	386	696	857	351	139	87	29	20	10	8	

MEAN HS(M) = 0.8 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 2431.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	394	550	117	16	22	2					1085
0.50-0.99		408	1032	110	22	10					1582
1.00-1.49			385	349	28	13	2				777
1.50-1.99			22	211	78	11	2				324
2.00-2.49				86	36	36	3	2			163
2.50-2.99				1	38	21	10				120
3.00-3.49					6	36	19	6			57
3.50-3.99						23	12	7			47
4.00-4.49						6	19	8			34
4.50-4.99							9	16			25
5.00-5.49								17		2	21
5.50-5.99								2			4
6.00-6.49											0
6.50-6.99										1	1
7.00+											0
TOTAL	394	958	1556	773	264	158	66	58	25	7	

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4002.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	837	1408	295	55	7	6	.	.	.	.	2608
0.50-0.99	.	902	2796	132	17	12	.	.	.	.	3859
1.00-1.49	.	.	938	894	36	12	.	.	.	.	1881
1.50-1.99	.	.	47	558	189	21	3	1	.	.	819
2.00-2.49	.	.	.	170	114	57	3	1	.	.	347
2.50-2.99	.	.	.	3	167	55	20	1	.	.	249
3.00-3.49	9	142	27	11	.	.	193
3.50-3.99	56	34	4	3	.	95
4.00-4.49	6	53	16	.	.	77
4.50-4.99	8	17	1	.	26
5.00-5.49	1	31	1	1	38
5.50-5.99	11	7	.	18
6.00-6.49	1	3	.	7
6.50-6.99	1	1
7.00+
TOTAL	837	2310	4076	1812	539	367	154	95	29	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 9578.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	942	1365	249	42	12	4	.	1	.	.	2615
0.50-0.99	.	719	1906	80	11	8	.	.	.	.	2724
1.00-1.49	.	.	466	349	31	8	.	.	.	.	854
1.50-1.99	.	.	16	179	62	17	1	1	.	.	276
2.00-2.49	.	.	.	34	29	23	4	2	.	.	92
2.50-2.99	20	9	8	2	2	.	41
3.00-3.49	9	3	.	1	.	13
3.50-3.99	4	3	.	.	.	7
4.00-4.49	1	.	.	.	1
4.50-4.99	1	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	942	2084	2637	684	165	82	20	6	3	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6207.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	820	1136	260	50	17	1	.	1	.	.	2285
0.50-0.99	.	565	992	75	11	4	.	.	.	.	1647
1.00-1.49	.	.	313	125	12	4	.	.	.	.	454
1.50-1.99	.	.	19	53	21	7	1	.	.	.	101
2.00-2.49	.	.	.	8	14	4	.	.	.	.	26
2.50-2.99	.	.	.	1	2	3	1	.	.	.	7
3.00-3.49	0
3.50-3.99	1	.	.	.	0
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	820	1701	1584	312	77	23	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 4239.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	681	984	116	24	4	1	.	.	.	.	1810
0.50-0.99	.	470	731	41	10	.	.	.	.	.	1252
1.00-1.49	.	.	275	66	7	1	.	.	.	.	349
1.50-1.99	.	.	18	39	4	5	.	.	.	.	66
2.00-2.49	.	.	.	9	3	.	1	.	.	.	13
2.50-2.99	1	.	.	.	1
3.00-3.49	1	.	.	1	.	.	2
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	681	1454	1140	179	29	8	2	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3276.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	697	1057	154	34	6	2	1	.	.	.	1951
0.50-0.99	.	518	1049	40	7	.	.	.	.	.	1611
1.00-1.49	.	.	601	29	7	3	.	.	.	.	640
1.50-1.99	.	.	24	155	6	2	.	.	.	.	187
2.00-2.49	.	.	.	31	3	1	.	.	.	.	35
2.50-2.99	3	.	.	.	.	.	1
3.00-3.49	3	1	.	.	.	.	4
3.50-3.99	0
4.00-4.49	i	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	697	1575	1828	289	30	9	i	0	0	i	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 4149.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	629	1095	187	40	9	1	.	.	.	.	1961
0.50-0.99	.	552	1439	32	2	1	.	.	.	.	2026
1.00-1.49	.	.	624	243	9	2	.	.	.	.	878
1.50-1.99	.	.	25	319	14	5	.	.	1	.	364
2.00-2.49	.	.	.	108	49	1	.	1	.	.	159
2.50-2.99	67	1	.	.	.	.	68
3.00-3.49	4	10	.	.	.	.	14
3.50-3.99	5	.	.	.	.	5
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	629	1647	2275	742	154	26	0	1	1	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 5130.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	780	1249	417	37	10	3	.	.	.	.	2496
0.50-0.99	.	973	1909	186	10	.	i	.	.	.	3079
1.00-1.49	.	.	630	572	34	3	.	.	.	.	1239
1.50-1.99	.	.	63	410	94	5	.	.	.	.	572
2.00-2.49	.	.	.	109	88	3	i	.	.	.	201
2.50-2.99	.	.	.	2	116	13	.	.	.	.	131
3.00-3.49	1	43	1	.	.	.	45
3.50-3.99	8	.	.	.	.	8
4.00-4.49	2	4	.	.	.	6
4.50-4.99	0
5.00-5.49	2	.	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	780	2222	3019	1316	353	80	7	2	1	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 7285.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	927	1642	223	40	17	8	.	.	.	.	2857
0.50-0.99	.	1932	326	98	12	5	.	i	.	.	2374
1.00-1.49	.	.	457	77	5	4	.	.	.	.	543
1.50-1.99	.	.	89	53	12	1	i	.	.	.	156
2.00-2.49	.	.	8	21	7	2	.	i	i	.	40
2.50-2.99	8	3	.	.	.	.	11
3.00-3.49	6	.	.	i	.	7
3.50-3.99	2	.	.	1	.	3
4.00-4.49	i	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	927	3574	1103	289	61	31	2	2	3	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 5614.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1555	1756	257	77	28	12	1				3686
0.50-0.99		1881	304	66	27	8	1	1			2288
1.00-1.49			609	12	12	7					640
1.50-1.99			125		4	3					132
2.00-2.49			5				1				6
2.50-2.99								1	1		2
3.00-3.49									1		1
3.50-3.99								1			1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1555	3637	1300	155	71	30	3	3	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 6326.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1305	1856	187	67	20	10					3445
0.50-0.99		2199	730	69	24	18	1	1			3042
1.00-1.49			702	21	11	8					742
1.50-1.99			266	33	6	2	1				308
2.00-2.49			6	18			1				25
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1305	4055	1891	208	61	38	3	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 7080.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1242	1786	212	86	43	5					3374
0.50-0.99		3324	1492	101	48	39	7				5011
1.00-1.49			1314	25	21	9	2				1371
1.50-1.99			574	34	1	10	1	1			621
2.00-2.49				32		3	2	1	1		39
2.50-2.99				3			1				4
3.00-3.49											0
3.50-3.99											0
4.00-4.49										2	2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1242	5110	3592	281	113	66	13	2	1	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 9756.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

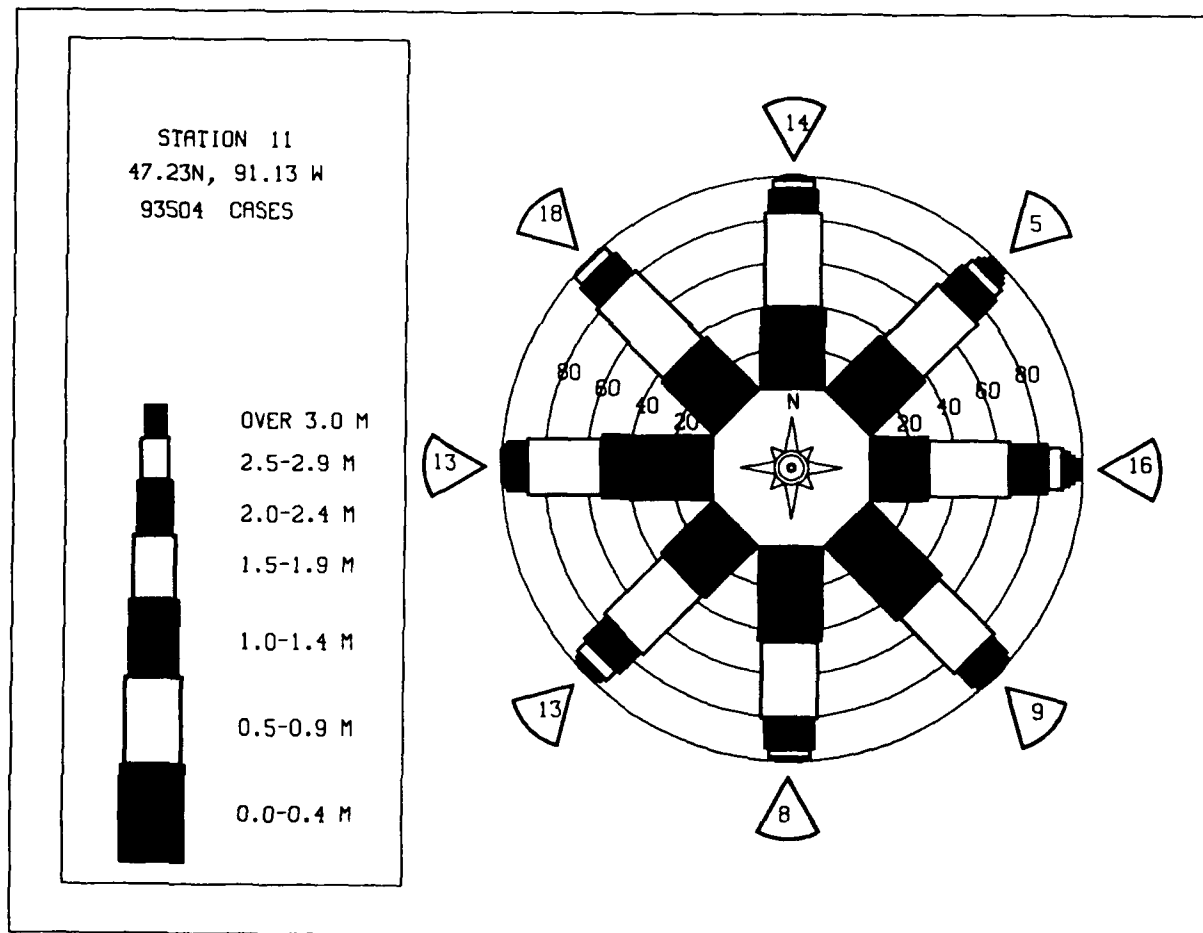
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1209	1358	308	86	38	18					3017
0.50-0.99		1977	1158	122	64	50	9				3380
1.00-1.49			882	48	55	22	5	8	1		1021
1.50-1.99			311	111	10	9	2	6			449
2.00-2.49			3	36	1	6	2	6	2		56
2.50-2.99							2	3	2		7
3.00-3.49							2	2	1		3
3.50-3.99								1			2
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1209	3335	2662	403	168	105	20	26	7	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 7432.

STATION S11 47.23N 91.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1435	1962	364	79	28	9	.	.	.	.	3877
0.50-0.99	.	1930	1849	160	40	25	2	.	.	.	4006
1.00-1.49	.	.	904	316	43	17	3	1	.	.	1284
1.50-1.99	.	.	180	240	59	19	2	2	.	.	502
2.00-2.49	.	.	2	73	39	19	5	3	.	.	141
2.50-2.99	.	.	.	1	50	12	7	2	1	.	73
3.00-3.49	3	26	5	3	1	.	38
3.50-3.99	10	5	2	1	.	18
4.00-4.49	1	8	3	.	.	12
4.50-4.99	1	5	.	.	4
5.00-5.49	5	.	.	5
5.50-5.99	1	.	.	2
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	1435	3892	3299	869	262	138	38	25	5	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S11 (47.23N 91.13W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.8	1.1	0.9	0.8	0.6	0.5	0.5	0.6	1.0	1.1	1.0	0.8
1957	0.9	0.8	0.8	0.8	0.8	0.6	0.4	0.5	0.6	0.6	1.0	0.8	0.7
1958	0.7	0.9	0.6	0.9	0.6	0.5	0.5	0.4	0.7	0.7	1.2	0.8	0.7
1959	0.8	0.9	0.7	0.6	0.8	0.7	0.4	0.4	0.7	0.8	0.9	1.1	0.7
1960	0.8	0.8	0.8	0.9	0.7	0.4	0.4	0.5	0.6	0.7	1.1	0.9	0.7
1961	0.8	0.8	1.0	0.7	0.6	0.5	0.4	0.3	0.5	0.6	0.7	0.7	0.6
1962	0.9	1.0	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.9	0.9	0.7
1963	0.8	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.8	1.0	0.7
1964	1.0	0.8	1.0	0.8	0.7	0.5	0.4	0.6	0.5	0.6	0.9	0.7	0.7
1965	0.9	0.9	1.0	0.7	0.6	0.5	0.4	0.6	0.6	0.8	1.0	1.2	0.7
1966	0.9	1.0	1.6	0.9	0.7	0.6	0.5	0.5	0.5	0.9	0.9	0.8	0.8
1967	1.2	0.9	1.0	0.7	0.7	0.6	0.4	0.5	0.6	0.9	0.8	1.1	0.8
1968	0.9	1.0	0.9	0.9	0.7	0.6	0.5	0.5	0.6	0.7	1.0	1.1	0.8
1969	1.0	0.7	0.7	0.8	0.6	0.6	0.4	0.5	0.5	0.8	0.7	0.7	0.7
1970	0.7	1.0	0.7	1.0	1.0	0.6	0.5	0.4	0.7	0.7	0.8	0.9	0.8
1971	0.9	1.1	0.9	0.8	0.7	0.5	0.4	0.4	0.4	0.7	0.9	0.7	0.7
1972	1.0	0.8	1.0	0.7	0.6	0.5	0.3	0.4	0.5	0.8	0.7	0.8	0.7
1973	0.7	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.7	0.9	0.8	0.6
1974	0.8	0.7	0.9	0.7	0.6	0.5	0.5	0.5	0.5	0.6	1.0	0.9	0.7
1975	1.0	0.8	1.2	0.9	0.5	0.5	0.5	0.5	0.6	0.8	1.0	0.7	0.8
1976	0.9	0.9	1.2	0.8	0.6	0.7	0.4	0.3	0.4	0.4	0.6	0.7	0.7
1977	0.6	1.0	1.3	0.6	0.6	0.4	0.4	0.4	0.6	0.7	0.9	1.1	0.7
1978	0.8	0.5	0.5	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.6
1979	0.6	0.7	0.9	0.7	0.5	0.3	0.3	0.4	0.7	0.7	0.7	0.8	0.6
1980	0.8	0.7	0.8	0.6	0.5	0.6	0.3	0.5	0.6	0.8	0.6	0.8	0.6
1981	0.7	0.8	0.7	0.7	0.5	0.5	0.4	0.4	0.6	0.8	0.7	0.8	0.6
1982	1.0	0.8	1.1	0.7	0.7	0.4	0.3	0.3	0.6	0.8	0.8	0.9	0.7
1983	0.8	0.8	1.1	0.7	0.7	0.5	0.5	0.3	0.7	0.7	1.2	0.8	0.8
1984	0.8	0.8	1.1	0.9	0.6	0.5	0.4	0.4	0.6	1.0	0.9	0.9	0.7
1985	0.9	0.8	1.4	0.7	0.6	0.3	0.3	0.5	0.6	0.7	0.8	0.8	0.7
1986	0.9	0.7	0.9	1.0	0.6	0.5	0.4	0.4	0.7	0.6	1.0	0.8	0.7
1987	0.7	0.9	1.3	0.6	0.7	0.4	0.5	0.3	0.4	0.7	0.8	0.7	0.7
MEAN	0.8	0.8	1.0	0.8	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S11 (47.23N 91.13W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	3.0	6.7	3.9	3.8	2.9	1.2	2.0	1.7	2.9	4.2	5.0	
1957	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1958	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1959	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1960	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1961	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1962	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1963	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1964	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1965	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1966	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1967	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1968	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1969	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1970	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1971	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1972	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1973	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1974	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1975	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1976	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1977	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1978	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1979	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1980	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1981	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1982	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1983	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1984	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1985	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1986	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	
1987	2.0	2.0	2.0	3.4	3.3	2.0	1.1	1.1	1.1	1.1	3.3	4.4	

32 YR. STATISTICS FOR WIS STATION S11

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	9.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	68.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85030421

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	2188	2711	672	180	82	36					5869
0.50-0.99		2237	624	309	150	81	16				3420
1.00-1.49			303	128	112	64	16	11			634
1.50-1.99			70	16	39	51	22	11	2		211
2.00-2.49			6		4	20	18	12	3		64
2.50-2.99						5		11	4	2	24
3.00-3.49							2	1	2	1	6
3.50-3.99										1	1
4.00-4.49									1	1	2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	2188	4948	1675	633	387	257	76	49	12	6	
MEAN HS(M) = 0.5	LARGEST HS(M) = 4.1		MEAN TP(SEC) = 3.5		NO. OF CASES = 9580.						

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 22.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	380	475	136	43	17	3					1054
0.50-0.99		254	271	94	25	14					658
1.00-1.49			56	50	26	20	2				154
1.50-1.99			9	25	5	12	5				58
2.00-2.49				4	5	8		2			22
2.50-2.99					4	4	3	4	1		17
3.00-3.49						6		1	1		8
3.50-3.99						4		1			5
4.00-4.49						1		2	1	2	6
4.50-4.99									1	1	2
5.00-5.49									1		1
5.50-5.99											0
6.00-6.49									1		1
6.50-6.99											0
7.00+										3	3
TOTAL	380	729	472	216	82	72	11	13	8	6	
MEAN HS(M) = 0.6	LARGEST HS(M) = 10.2		MEAN TP(SEC) = 3.8		NO. OF CASES = 1875.						

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 45.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	443	467	167	32	14	9	.	.	.	.	1132
0.50-0.99	.	273	459	81	18	11	.	.	.	.	842
1.00-1.49	.	.	115	98	24	12	4	.	.	.	253
1.50-1.99	.	.	5	50	23	16	2	.	.	.	96
2.00-2.49	.	.	.	9	13	14	5	2	1	.	44
2.50-2.99	.	.	.	1	13	3	3	1	.	.	21
3.00-3.49	1	13	3	2	.	.	18
3.50-3.99	3	3	2	.	.	8
4.00-4.49	1	3	1	1	.	5
4.50-4.99	3	2	1	.	4
5.00-5.49	1	.	i	2
5.50-5.99	0
6.00-6.49	i	1
6.50-6.99	1
7.00+	2
TOTAL	443	740	746	271	106	82	24	10	2	5	
MEAN HS(M) = 0.7	LARGEST HS(M)=		7.9	MEAN TP(SEC)=		3.9	NO. OF CASES=		2288.		

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 67.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	382	540	135	24	8	1	.	.	.	.	1090
0.50-0.99	.	409	868	118	16	5	.	.	.	.	1416
1.00-1.49	.	.	332	226	26	19	3	.	.	.	702
1.50-1.99	.	.	20	216	73	18	2	1	.	.	330
2.00-2.49	.	.	.	75	57	25	4	1	.	.	162
2.50-2.99	.	.	.	1	95	34	4	2	1	.	137
3.00-3.49	7	52	9	7	1	.	88
3.50-3.99	29	6	5	1	.	41
4.00-4.49	5	7	2	2	.	26
4.50-4.99	10	7	1	.	23
5.00-5.49	2	17	4	.	23
5.50-5.99	6	5	1	12
6.00-6.49	2	.	5
6.50-6.99	5	.	5
7.00+	4	6	10
TOTAL	382	949	1355	756	282	198	62	57	31	8	
MEAN HS(M) = 1.1	LARGEST HS(M)= 10.0		MEAN TP(SEC)= 4.5		NO. OF CASES= 3836.						

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	886	1361	302	43	13	7					2612
0.50-0.99		982	2754	173	37	20	1				3967
1.00-1.49			1098	953	57	17	2				2127
1.50-1.99			71	656	225	34	2	1	1		990
2.00-2.49				227	136	81	3	3	1		451
2.50-2.99				1	211	52	24	5	4		297
3.00-3.49					19	161	23	2	1		206
3.50-3.99						70	36	1	1		108
4.00-4.49						10	53	10			73
4.50-4.99							18	17	2		37
5.00-5.49								31	5		36
5.50-5.99								12	9		21
6.00-6.49								1	11		12
6.50-6.99									3	1	4
7.00+									1	2	3
TOTAL	886	2343	4225	2053	698	452	162	83	39	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 10256.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	938	1444	289	43	14	5		1			2734
0.50-0.99		882	1834	119	19	12					2866
1.00-1.49			518	202	37	11	1				769
1.50-1.99			27	133	35	19	4	1			219
2.00-2.49				38	16	10	4				69
2.50-2.99					16	3	3		2		24
3.00-3.49					2	8	1				11
3.50-3.99						4	2				6
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	938	2326	2668	535	139	72	15	2	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 6277.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	759	1071	220	41	14	2		1			2108
0.50-0.99		643	884	86	11	7					1627
1.00-1.49			360	25	11	7					433
1.50-1.99			20	54	11	6	1				94
2.00-2.49				5	2	6	3	2			16
2.50-2.99											0
3.00-3.49						1	1				2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	759	1714	1484	241	49	25	5	3	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4013.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	628	761	97	27	9	3					1525
0.50-0.99		716	609	63	14	4					1406
1.00-1.49			274	25	7	2					308
1.50-1.99			34	25		3					62
2.00-2.49				3		1					4
2.50-2.99											0
3.00-3.49					1						1
3.50-3.99							1				1
4.00-4.49							1				1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	628	1477	1014	143	31	13	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3102.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	675	681	106	37	9	2	.	.	.	.	1510
0.50-0.99	.	931	691	42	9	.	.	1	.	.	1674
1.00-1.49	.	.	350	17	9	2	.	.	.	.	378
1.50-1.99	.	.	57	32	1	1	1	.	.	.	92
2.00-2.49	0
2.50-2.99	.	.	.	2	.	.	1	1	.	.	4
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	675	1612	1204	130	29	5	2	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3430.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	603	819	75	23	11	3	.	.	.	.	1534
0.50-0.99	.	782	1522	38	7	.	.	.	.	.	2349
1.00-1.49	.	.	900	111	5	4	.	.	.	.	1020
1.50-1.99	.	.	94	361	2	5	.	.	1	.	463
2.00-2.49	.	.	.	131	31	1	.	.	.	.	163
2.50-2.99	.	.	.	1	42	1	.	.	.	.	44
3.00-3.49	5	.	.	.	.	.	5
3.50-3.99	1	.	.	.	1	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	603	1601	2591	665	103	15	0	0	1	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5227.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	711	1055	124	28	12	2	.	.	.	.	1932
0.50-0.99	.	590	1648	37	14	3	.	.	.	.	2292
1.00-1.49	.	.	934	209	5	4	.	.	.	.	1152
1.50-1.99	.	.	53	547	5	3	1	.	.	.	604
2.00-2.49	.	.	.	255	54	.	.	1	1	.	311
2.50-2.99	97	.	.	.	.	.	97
3.00-3.49	4	6	.	.	.	.	10
3.50-3.99	5	.	.	.	.	5
4.00-4.49	0
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	711	1645	2759	1076	186	23	3	1	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 5999.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	794	901	111	41	11	6	1	.	.	.	1865
0.50-0.99	.	1094	1186	31	8	2	2	1	.	.	2324
1.00-1.49	.	.	695	52	8	6	.	.	.	.	761
1.50-1.99	.	.	140	151	3	.	1	1	.	.	296
2.00-2.49	.	.	.	101	16	1	.	.	1	.	119
2.50-2.99	.	.	.	5	14	.	.	.	.	.	19
3.00-3.49	3	3	.	.	1	.	7
3.50-3.99	2	.	.	.	1	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	794	1995	2132	381	63	20	4	3	2	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 5054.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
2.00-0.49	1329	1076	187	59	25	9	1				2686
0.50-0.99		1996	1441	41	18	7	1	2	.	.	3506
1.00-1.49	.	.	1220	4	11	7		.	.	.	1242
1.50-1.99	.	.	355	213	2	1	1	.	.	.	572
2.00-2.49	.	.	.	102				.	.	.	102
2.50-2.99	.	.	.	21	1	.	.	1	1	.	24
3.00-3.49	.	.	.	1	.	.	.	1	.	.	2
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1329	3072	3203	441	57	24	3	4	1	0	
MEAN HS(M) = 0.7	LARGEST HS(M)= 3.2		MEAN TP(SEC)= 3.5		NO. OF CASES= 7616.						

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1188	1640	181	69	21	8					3107
0.50-0.99	.	2879	1719	57	25	20	3	1	.	.	4704
1.00-1.49	.	1	1571	11	11	6			.	.	1600
1.50-1.99	.	.	500	393	2	4		1	.	.	900
2.00-2.49	.	.	.	178			1	1	.	.	180
2.50-2.99	.	.	.	10	5	.	.	.	.	.	15
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	2	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1188	4520	3971	718	65	38	4	3	0	2	
MEAN HS (M) = 0.8	LARGEST HS (M) =	3.8	MEAN TP (SEC) =	3.5	NO. OF CASES =	9837.					

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

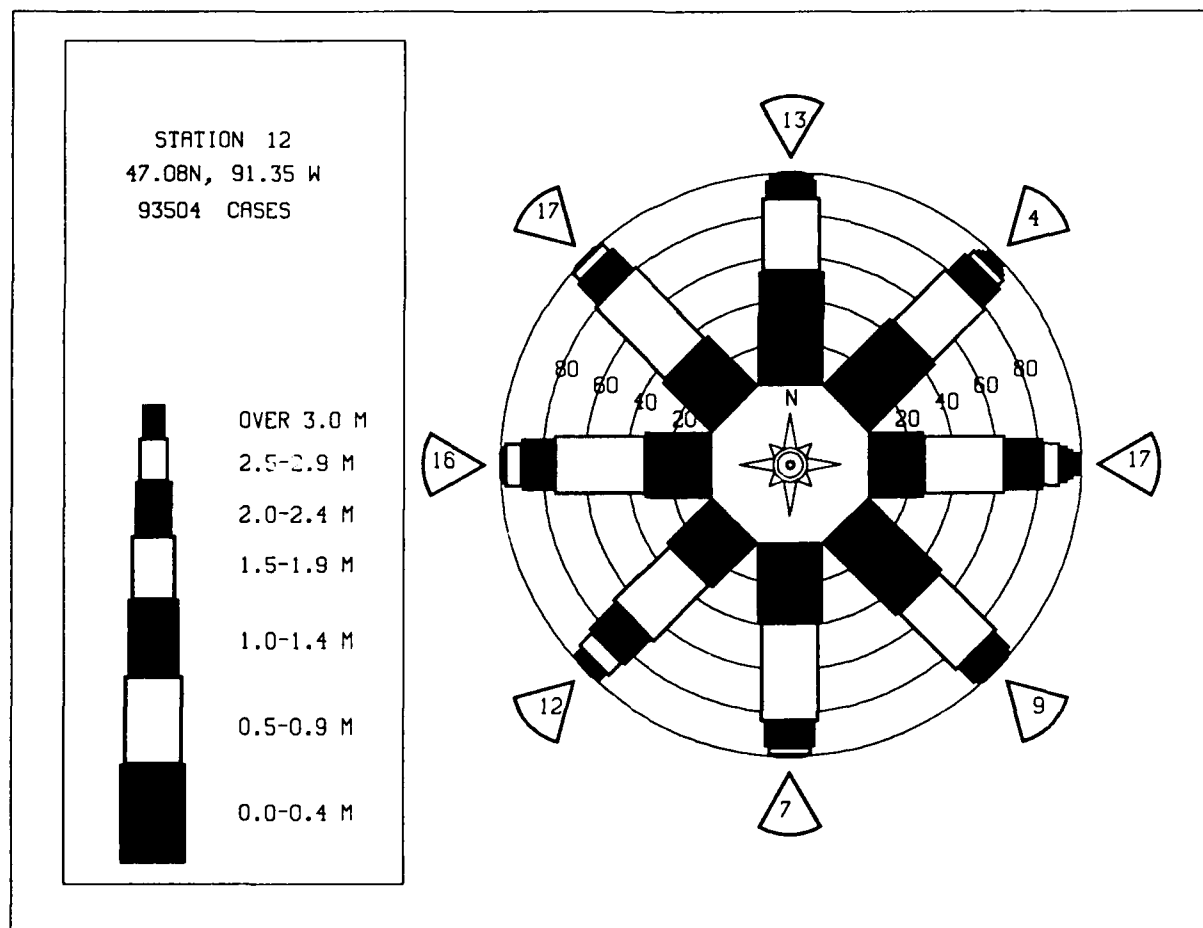
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	1115	1446	211	91	35	13					2911
0.50-0.99		3049	1286	86	67	36	5				4529
1.00-1.49			1265	24	22	19	1	5	1		1337
1.50-1.99			494	54	5	8	1	5	2		569
2.00-2.49			1	35	1	3	1	2	2	1	45
2.50-2.99				4			1	1			6
3.00-3.49									1		1
3.50-3.99										1	1
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1115	4495	3257	294	129	77	11	13	6	2	
MEAN HS(M) = 0.7	LARGEST HS(M)= 3.5		MEAN TP(SEC)= 3.5		NO. OF CASES= 8800.						

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	1055	1300	275	118	62	25	1	.	.	.	2836
0.50-0.99	.	1971	495	181	113	69	13	1	.	.	2843
1.00-1.49	.	.	637	44	59	58	16	14	1	.	829
1.50-1.99	.	.	128	.	9	23	6	16	2	.	188
2.00-2.49	.	.	1	4	.	5	10	4	4	1	29
2.50-2.99	2	5	3	10
3.00-3.49	1	1	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1055	3271	1536	351	243	180	46	38	13	4	
MEAN HS(M) = 0.6	LARGEST HS(M) =		3.2	MEAN TP(SEC) =		3.6	NO. OF CASES =		6314.		

STATION S12 47.08N 91.35W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1408	1775	329	91	36	14	.	.	.	.	3653
0.50-0.99	.	1969	1829	156	55	29	4	.	.	.	4042
1.00-1.49	.	.	1063	231	43	26	4	3	.	.	1370
1.50-1.99	.	.	208	293	44	20	5	.	.	.	574
2.00-2.49	.	.	.	117	33	17	5	3	1	.	176
2.50-2.99	.	.	.	4	50	10	4	2	2	.	72
3.00-3.49	4	26	3	1	1	.	35
3.50-3.99	12	4	.	.	.	16
4.00-4.49	1	7	2	.	.	10
4.50-4.99	3	2	.	.	5
5.00-5.49	5	1	.	6
5.50-5.99	1	1	.	2
6.00-6.49	1	.	1
6.50-6.99	1	1
7.00+	1
TOTAL	1408	3744	3429	892	265	155	39	23	7	1	

MEAN HS(M)= 0.7 LARGEST HS(M)= 10.2 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S12 (47.08N 91.35W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	0.8	1.1	0.9	0.8	0.6	0.5	0.6	0.6	1.0	1.2	1.1	0.8
1957	1.0	0.8	0.8	0.8	0.9	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7
1958	0.7	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1959	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1960	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1961	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1962	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1963	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1964	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1965	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1966	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1967	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1968	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1969	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1970	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1971	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1972	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1973	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1974	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1975	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1976	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1977	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1978	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1979	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1980	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1981	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1982	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1983	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1984	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1985	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1986	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
1987	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
MEAN	0.9	0.9	1.0	0.8	0.7	0.5	0.4	0.5	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S12 (47.08N 91.35W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	4.2	6.6	4.0	3.9	3.1	1.3	2.1	1.7	3.3	4.0	5.0	
1957	2.9	2.3	4.3	4.5	3.2	1.7	1.8	1.4	2.1	2.0	3.2	2.4	
1958	2.6	4.9	2.9	5.8	2.4	1.4	1.6	1.3	2.1	2.4	5.1	2.7	
1959	2.4	3.1	2.6	2.0	2.5	1.9	1.5	1.3	2.9	2.6	2.8	7.1	
1960	2.2	2.5	4.4	3.4	3.1	1.6	1.2	2.5	1.7	2.4	7.5	2.4	
1961	2.2	2.5	2.8	2.3	2.9	2.3	1.9	2.2	1.5	2.0	2.7	2.1	
1962	3.4	3.6	5.1	2.6	2.3	2.8	1.2	1.4	2.3	2.9	2.6	2.5	
1963	2.2	4.9	2.7	2.7	2.7	2.9	1.2	1.6	1.9	2.2	1.1	3.9	
1964	4.6	2.7	3.8	2.8	2.8	2.3	1.4	3.7	2.9	2.5	3.3	3.4	
1965	3.7	5.1	4.4	2.4	2.0	1.8	1.2	1.2	2.1	2.4	6.6	2.5	
1966	2.8	4.4	7.2	5.8	2.5	2.3	1.2	1.7	1.8	2.7	4.4	2.9	
1967	7.7	7.7	7.2	2.6	3.7	2.5	1.8	1.5	2.2	3.0	5.5	3.1	
1968	4.1	2.4	2.7	4.0	1.1	2.0	3.0	1.7	1.7	1.9	4.0	3.7	
1969	3.0	3.1	2.3	4.0	2.4	2.3	1.7	2.4	1.9	2.6	5.5	3.6	
1970	2.2	2.7	4.2	3.9	4.0	2.5	1.5	3.3	2.3	2.3	4.4	4.8	
1971	2.4	5.9	4.4	3.2	2.2	1.8	1.4	1.3	2.1	3.3	4.1	2.2	
1972	3.8	4.1	3.5	3.1	3.5	1.6	1.2	1.1	2.1	2.6	3.3	3.5	
1973	3.7	4.1	3.5	3.1	3.3	1.3	1.1	1.1	1.9	2.2	3.3	3.3	
1974	2.8	0.0	4.7	3.7	2.3	1.7	2.2	3.3	2.0	2.2	4.4	3.7	
1975	5.1	2.2	6.2	4.3	2.1	1.5	1.4	2.5	2.2	2.2	3.3	3.0	
1976	3.4	2.2	6.1	3.6	2.0	2.7	0.9	1.1	1.6	3.3	8.8	2.6	
1977	2.0	7.7	2.8	2.1	1.9	1.3	1.4	1.3	3.7	3.7	4.4	4.4	
1978	1.9	2.3	2.5	2.5	2.3	1.6	1.2	1.6	4.4	2.3	9.9	3.5	
1979	2.4	3.3	3.3	2.8	2.3	1.3	1.3	3.2	4.4	1.8	6.6	2.7	
1980	3.5	3.7	3.1	2.0	2.8	3.0	1.1	1.9	2.4	2.6	5.5	2.5	
1981	2.2	2.6	2.7	2.3	2.3	1.9	1.2	1.6	3.1	2.8	2.7	2.0	
1982	5.9	3.6	4.9	3.8	2.4	1.9	1.0	1.1	2.3	3.2	3.2	2.9	
1983	2.5	3.1	5.7	2.6	2.7	1.7	1.5	1.4	2.0	2.4	5.5	2.7	
1984	2.9	3.5	4.0	3.8	2.0	2.1	1.4	5.5	5.1	5.1	2.1	2.8	
1985	4.2	3.4	10.2	2.9	2.6	2.0	1.3	2.2	2.7	3.1	4.6	2.8	
1986	4.1	2.8	3.7	4.3	2.5	1.5	2.3	1.3	2.8	2.6	5.1	2.7	
1987	2.4	5.3	5.3	2.2	3.5	1.5	1.5	1.4	1.2	2.5	3.0	3.1	

32 YR. STATISTICS FOR WIS STATION S12

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	10.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	29.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030418

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2435	2820	629	206	87	45	6	.	.	.	6228
0.50-0.99	.	2727	465	276	145	86	24	7	.	.	3730
1.00-1.49	.	.	453	66	82	82	18	16	2	.	719
1.50-1.99	.	.	69	3	24	44	26	22	3	2	193
2.00-2.49	.	.	6	.	.	13	5	12	9	2	47
2.50-2.99	1	2	5	6	3	17
3.00-3.49	1	1	3	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	1	2	3
5.00-5.49	1	1
5.50-5.99	1	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2435	5547	1622	551	338	271	81	63	22	14	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 10250.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	380	510	108	41	13	5	.	.	.	.	1057
0.50-0.99	.	314	282	81	24	18	2	.	.	.	721
1.00-1.49	.	.	58	85	24	20	3	1	.	.	191
1.50-1.99	.	.	9	19	11	16	3	1	1	.	60
2.00-2.49	.	.	.	3	13	11	4	5	1	.	37
2.50-2.99	11	1	1	.	.	13
3.00-3.49	3	1	3	2	.	12
3.50-3.99	1	3	1	1	6
4.00-4.49	1	.	.	1
4.50-4.99	1	1	2
5.00-5.49	1	.	1
5.50-5.99	1	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	380	824	457	229	85	84	18	15	7	3	

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 1979.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	533	527	178	38	18	9	.	.	.	.	1303
0.50-0.99	.	379	320	84	24	10	3	.	.	.	820
1.00-1.49	.	.	74	105	33	16	4	.	.	.	232
1.50-1.99	.	.	6	26	7	5	3	.	.	.	72
2.00-2.49	.	.	.	3	8	6	4	.	.	.	21
2.50-2.99	.	.	.	1	2	12	1	3	1	.	20
3.00-3.49	7	2	3	1	.	13
3.50-3.99	1	.	.	1	2
4.00-4.49	1	1	.	2
4.50-4.99	1	1	.	2
5.00-5.49	1	1	2
5.50-5.99	1	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	533	906	578	257	110	67	20	11	5	3	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 2343.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	419	521	122	25	10	2	.	.	.	.	1099
0.50-0.99	.	457	716	114	16	6	.	1	.	.	1310
1.00-1.49	.	.	275	251	24	17	3	1	.	.	571
1.50-1.99	.	.	21	150	59	17	2	1	.	.	250
2.00-2.49	.	.	.	54	53	25	2	.	1	.	156
2.50-2.99	.	.	.	1	66	28	3	4	2	.	104
3.00-3.49	3	54	3	4	1	.	65
3.50-3.99	25	8	5	2	.	39
4.00-4.49	4	10	4	2	1	21
4.50-4.99	11	12	3	.	26
5.00-5.49	1	9	3	.	15
5.50-5.99	4	3	.	5
6.00-6.49	4	.	5
6.50-6.99	1	.	5
7.00+	6	7
TOTAL	419	978	1134	595	231	178	43	45	26	9	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 3442.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	871	1372	256	47	13	8	1	.	.	.	2567
0.50-0.99	.	1100	2645	175	40	13	.	.	.	.	3974
1.00-1.49	.	.	1103	1028	56	12	2	.	.	.	2201
1.50-1.99	.	.	63	667	258	31	2	1	.	.	1022
2.00-2.49	.	.	.	210	155	85	21	3	2	.	476
2.50-2.99	.	.	.	2	247	49	12	4	3	.	317
3.00-3.49	17	182	32	3	.	.	234
3.50-3.99	82	42	3	1	.	128
4.00-4.49	9	53	20	.	.	82
4.50-4.99	18	26	1	.	45
5.00-5.49	34	4	.	38
5.50-5.99	11	18	.	29
6.00-6.49	17	.	17
6.50-6.99	9	2	11
7.00+	1	4	5
TOTAL	871	2472	4067	2129	786	471	183	105	56	6	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 10443.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	858	1509	236	36	14	6	.	2	.	.	2661
0.50-0.99	.	841	1896	105	16	10	.	.	.	.	2868
1.00-1.49	.	.	592	204	34	9	.	.	.	.	839
1.50-1.99	.	.	25	182	45	18	2	1	.	.	273
2.00-2.49	.	.	.	60	16	12	5	1	1	.	95
2.50-2.99	22	7	3	.	.	.	32
3.00-3.49	1	12	1	.	.	.	14
3.50-3.99	3	3	.	.	.	6
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	858	2350	2749	587	148	77	16	4	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 6363.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	728	1118	162	33	11	4	.	.	.	.	2056
0.50-0.99	.	640	948	84	10	3	.	.	.	.	1685
1.00-1.49	.	.	447	58	10	7	.	.	.	.	522
1.50-1.99	.	.	16	79	14	9	1	2	.	.	121
2.00-2.49	.	.	.	6	3	4	2	.	.	.	15
2.50-2.99	0
3.00-3.49	.	.	.	1	.	2	1	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	728	1758	1573	261	48	29	4	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4127.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	649	971	85	23	7	.	.	.	.	.	1735
0.50-0.99	.	593	755	64	13	1	.	.	.	.	1426
1.00-1.49	.	.	331	22	5	5	.	.	.	.	363
1.50-1.99	.	.	22	48	1	2	.	.	.	.	73
2.00-2.49	.	.	.	9	1	3	.	.	.	.	13
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	1	.	.	.	1
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	649	1564	1193	167	27	11	2	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 3386.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	725	1104	96	25	12	3	.	.	.	.	1965
0.50-0.99	.	720	1256	33	6	2	.	.	.	.	2017
1.00-1.49	.	.	1037	24	7	3	.	.	.	.	1070
1.50-1.99	.	.	45	244	1	1	.	.	.	.	291
2.00-2.49	.	.	.	70	2	1	1	1	.	.	75
2.50-2.99	.	.	.	1	5	.	.	.	.	.	7
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	725	1824	2434	396	33	10	1	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 5081.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	620	1100	144	23	9	3	.	.	.	.	1899
0.50-0.99	.	1112	1721	56	9	.	.	.	.	.	2898
1.00-1.49	.	.	779	308	5	3	.	.	.	.	1095
1.50-1.99	.	.	103	348	2	2	.	.	1	.	456
2.00-2.49	.	.	3	91	3	.	.	.	.	.	97
2.50-2.99	.	.	.	2	6	.	.	.	.	1	9
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	620	2212	2750	828	35	8	0	0	1	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 6045.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	768	1143	142	33	14	5	.	.	.	.	2105
0.50-0.99	.	1680	559	105	5	2	.	.	.	.	2351
1.00-1.49	.	.	425	93	7	2	.	.	.	.	527
1.50-1.99	.	.	168	25	9	4	.	.	.	.	206
2.00-2.49	.	.	2	9	2	.	.	1	.	.	14
2.50-2.99	.	.	.	1	.	1	.	.	.	.	2
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	768	2823	1296	267	37	14	0	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 4877.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	994	1044	132	55	12	16	2	1	.	.	2256
0.50-0.99	.	1259	154	32	12	4	1	1	.	.	1463
1.00-1.49	.	.	288	13	6	5	1	.	.	.	313
1.50-1.99	.	.	59	1	.	.	.	.	2	.	62
2.00-2.49	.	.	1	2	.	.	.	.	.	.	3
2.50-2.99	.	.	.	1	.	.	.	.	2	.	3
3.00-3.49	1	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	994	2303	634	104	30	25	4	2	4	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3844.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1687	1772	220	71	22	17					3789
0.50-0.99		2259	188	42	28	9	2	1	.	.	2529
1.00-1.49	.	.	709	8	9	9		.	.	.	735
1.50-1.99	.	.	108	.	2	2	1	.	.	.	113
2.00-2.49	.	.	2	4				.	1	.	7
2.50-2.99	.	.	.	.	.	.	1	1	1	.	3
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1687	4031	1227	125	61	37	4	2	2	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.7		MEAN TP (SEC) = 3.1		NO. OF CASES = 6718.						

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1390	1873	182	80	26	13	1	1	.	.	3566
0.50-0.99	.	2963	588	56	22	17	4	1	.	.	3651
1.00-1.49	.	.	1184	13	10	5	1	.	.	.	1213
1.50-1.99	.	.	231	9	1	1	1	1	.	.	244
2.00-2.49	.	.	7	10	1	1	.	.	.	.	18
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	1	.	1	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1390	4836	2192	169	59	37	7	4	0	1	
MEAN HS(M) = 0.6	LARGEST HS(M) = 3.4		MEAN TP(SEC) = 3.2		NO. OF CASES = 8141.						

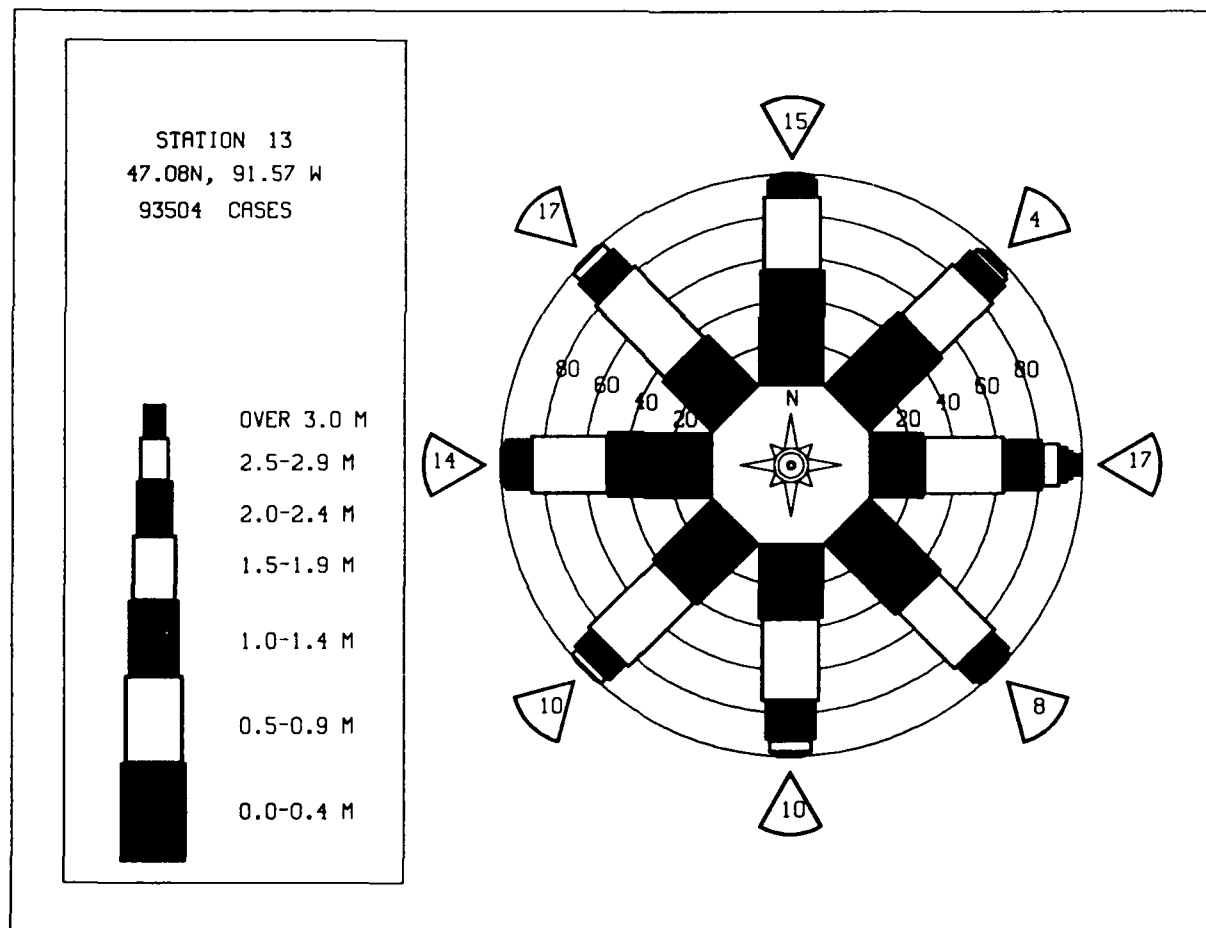
STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1290	1666	217	108	35	19	1	.	.	.	3336
0.50-0.99	.	3639	1599	65	52	37	3	.	.	.	5395
1.00-1.49	.	.	1464	23	11	17	4	6	2	.	1527
1.50-1.99	.	.	636	65	5	4	4	5	3	1	723
2.00-2.49	.	.	2	34	.	1	.	.	1	.	38
2.50-2.99	.	.	.	7	.	.	.	.	.	1	8
3.00-3.49	1	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1290	5305	3918	302	103	78	12	11	7	2	
MEAN HS(M) = 0.7	LARGEST HS(M)=		3.1	MEAN TP(SEC)=		3.5	NO. OF CASES=		10321.		

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1155	1272	254	115	68	37	3				2904
0.50-0.99		1980	448	113	82	52	13	5	.	.	2693
1.00-1.49			682	16	18	28	6	11	2	.	763
1.50-1.99			119	8	9	12	6	9	3	1	167
2.00-2.49			3	9		1	4	4	2	3	26
2.50-2.99								1	1	1	3
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1155	3252	1506	261	177	130	32	30	8	5	
MEAN HS(M) = 0.6	LARGEST HS(M) = 2.6		MEAN TP(SEC) = 3.4		NO. OF CASES = 6144.						

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1550	2032	317	96	38	19	1				4053
0.50-0.99		2267	1454	149	51	27	5	1	.	.	3954
1.00-1.49	.	.	990	232	34	24	4	3	.	.	1287
1.50-1.99	.	.	170	188	47	17	5	4	1	.	432
2.00-2.49	.	.	2	58	25	16	5	2	1	.	109
2.50-2.99	.	.	.	1	34	11	2	4	1	.	51
3.00-3.49	2	26	1	4	.	.	33
3.50-3.99	11	5	2	.	.	17
4.00-4.49	1	5	4	.	.	9
4.50-4.99	2	4	.	.	6
5.00-5.49	2	4	.	.	5
5.50-5.99	1	4	1	.	3
6.00-6.49	2	2	.	2
6.50-6.99	1	1	.	1
7.00+	1	1
TOTAL	1550	4299	2933	724	231	152	39	25	9	1	
MEAN HS(M)= 0.7	LARGEST HS(M)= 7.9	MEAN TP(SEC)= 3.6	TOTAL CASES=	93504.							



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S13 (47.08N 91.57W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.7	1.0	0.8	0.8	0.6	0.5	0.5	0.6	0.9	1.1	1.0	0.8
1957	0.8	0.8	0.8	0.8	0.9	0.5	0.5	0.5	0.6	0.6	0.9	0.8	0.7
1958	0.7	0.9	0.6	0.8	0.6	0.5	0.5	0.4	0.7	0.7	1.1	0.8	0.7
1959	0.8	0.8	0.7	0.6	0.7	0.5	0.4	0.4	0.7	0.8	0.9	1.1	0.7
1960	0.7	0.8	0.8	0.8	0.9	0.7	0.5	0.5	0.6	0.7	1.1	0.8	0.7
1961	0.8	0.8	1.0	0.7	0.7	0.5	0.4	0.3	0.5	0.5	0.6	0.6	0.6
1962	0.9	1.0	1.0	0.8	0.6	0.5	0.4	0.5	0.5	0.7	0.9	0.9	0.7
1963	0.8	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.8	0.9	0.7
1964	1.0	0.7	0.9	0.8	0.7	0.5	0.4	0.7	0.5	0.6	0.9	0.7	0.7
1965	0.9	0.9	0.7	0.6	0.5	0.5	0.4	0.3	0.6	0.7	0.9	1.1	0.7
1966	0.9	0.9	1.4	0.9	0.7	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8
1967	1.1	0.8	0.8	0.7	0.7	0.5	0.4	0.5	0.5	0.8	0.7	0.9	0.7
1968	0.9	0.8	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.6	0.8	1.0	0.7
1969	0.9	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7
1970	0.7	0.9	0.7	1.0	1.0	0.6	0.5	0.4	0.7	0.7	0.7	0.9	0.7
1971	0.9	1.1	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.7	0.8	0.7	0.7
1972	0.9	0.7	1.0	0.7	0.5	0.4	0.3	0.4	0.5	0.8	0.6	0.7	0.6
1973	0.7	0.7	0.7	0.7	0.6	0.4	0.4	0.3	0.5	0.7	0.8	0.7	0.6
1974	0.8	0.7	1.0	0.7	0.6	0.5	0.5	0.5	0.5	0.6	1.0	0.9	0.7
1975	1.0	0.8	1.2	1.0	0.6	0.5	0.5	0.5	0.6	0.8	0.9	0.7	0.8
1976	0.9	0.8	1.2	0.8	0.6	0.7	0.4	0.3	0.4	0.6	0.6	0.6	0.6
1977	0.6	1.0	1.2	0.6	0.6	0.4	0.4	0.4	0.6	0.7	0.9	1.0	0.7
1978	0.6	0.5	0.5	0.7	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.6
1979	0.6	0.7	0.9	0.7	0.5	0.5	0.3	0.4	0.6	0.7	0.7	0.8	0.6
1980	0.8	0.6	0.7	0.5	0.5	0.5	0.4	0.5	0.6	0.8	0.6	0.6	0.6
1981	0.6	0.8	0.7	0.7	0.5	0.5	0.4	0.4	0.6	0.7	0.6	0.6	0.6
1982	1.0	0.8	1.0	0.7	0.7	0.4	0.3	0.3	0.6	0.7	0.8	0.9	0.7
1983	0.8	0.8	1.3	0.7	0.7	0.6	0.5	0.4	0.6	0.7	1.1	0.8	0.7
1984	0.7	0.8	1.0	0.9	0.6	0.6	0.4	0.5	0.6	0.9	0.8	0.8	0.7
1985	0.8	0.8	1.3	0.7	0.6	0.5	0.3	0.5	0.6	0.7	0.8	0.8	0.7
1986	0.9	0.6	0.8	1.0	0.6	0.5	0.4	0.4	0.7	0.6	0.9	0.8	0.7
1987	0.6	0.8	1.3	0.6	0.7	0.4	0.5	0.3	0.4	0.7	0.8	0.7	0.6
MEAN	0.8	0.8	0.9	0.8	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S13 (47.08N 91.57W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1957	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1958	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1959	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1960	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1961	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1962	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1963	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1964	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1965	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1966	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1967	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1968	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1969	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1970	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1971	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1972	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1973	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1974	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1975	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1976	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1977	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1978	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1979	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1980	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1981	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1982	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1983	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1984	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1985	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1986	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	
1987	3.0	3.0	5.9	3.9	4.2	3.2	1.1	2.2	1.9	3.3	3.4	5.1	

32 YR. STATISTICS FOR WIS STATION S13

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	83.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67010703

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	2085	1321	501	159	70	27		1			4164
0.50-0.99		2892	1904	222	139	71	14	3	.	.	5245
1.00-1.49			942	16	62	74	18	8	.	.	1120
1.50-1.99			278	130	13	44	18	19	3	.	505
2.00-2.49			1	83	5	20	18	19	6	1	153
2.50-2.99				8	1	3	7	12	10	4	45
3.00-3.49				2	2			4	5	3	16
3.50-3.99					1				1	2	4
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49										1	1
5.50-5.99										1	1
6.00-6.49										1	1
6.50-6.99										1	0
7.00+										1	0
TOTAL	2085	4213	3626	620	293	239	75	66	25	15	1
MEAN HS (M) = 0.6	LARGEST HS (M) = 7.6		MEAN TP (SEC) = 3.6		NO. OF CASES = 10544.						

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	377	407	133	45	13	5					980
0.50-0.99		402	304	77	35	20	1				839
1.00-1.49			120	25	18	23					187
1.50-1.99			11	29	6	5	4	2	1		58
2.00-2.49				10	6	4	5	2	3		30
2.50-2.99											
3.00-3.49					12		1	3			16
3.50-3.99					2	6	2				10
4.00-4.49						3		2		1	8
4.50-4.99							2		1	1	6
5.00-5.49										1	1
5.50-5.99									1		0
6.00-6.49											0
6.50-6.99									1		0
7.00+											0
TOTAL	377	809	568	186	92	67	18	9	8	3	
MEAN HS(M) = 0.6	LARGEST HS(M) = 6.5		MEAN TP(SEC) = 3.8		NO. OF CASES = 2013.						

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	495	460	196	50	16	7					1224
0.50-0.99	.	266	451	104	23	13					857
1.00-1.49	.	.	231	47	18	22	5	1	.	.	324
1.50-1.99	.	.	10	70	23	10			1	.	118
2.00-2.49	.	.	.	25	6	6	8	2	.	.	47
2.50-2.99	.	.	.	2	19	5	6	1	1	.	34
3.00-3.49	3	7	1	3	2	.	16
3.50-3.99	1	10	3	1	1	.	15
4.00-4.49	1	1	2	1	.	5
4.50-4.99	1	1	.	.	3
5.00-5.49	1	.	1	.	3
5.50-5.99	1	.	2	3
6.00-6.49	1	2	3
6.50-6.99	1	.	1
7.00+	0
TOTAL	495	726	888	298	109	81	30	12	7	4	
MEAN HS(M) = 0.7	LARGEST HS(M) = 6.5		MEAN TP(SEC) = 3.9		NO. OF CASES = 2493.						

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49											1185
0.50-0.99	457	521	162	38	6	1	.	.	.	.	1531
1.00-1.49		443	912	130	34	12	.	.	.	.	962
1.50-1.99	.	.	816	78	32	28	5	3	.	.	386
2.00-2.49	.	.	102	226	33	31	6	.	.	.	232
2.50-2.99	.	.	.	166	18	34	11	2	1	.	121
3.00-3.49	.	.	.	27	40	28	17	3	3	.	60
3.50-3.99	.	.	.	.	17	18	14	7	4	.	41
4.00-4.49	.	.	.	.	5	12	6	16	2	.	21
4.50-4.99	.	.	.	.	.	4	5	8	4	.	11
5.00-5.49	.	.	.	.	.	.	1	4	5	1	6
5.50-5.99	.	.	.	.	.	.	1	.	4	.	8
6.00-6.49	.	.	.	.	.	.	.	2	6	.	3
6.50-6.99	.	.	.	.	.	.	.	.	3	1	3
7.00+	.	.	.	.	.	.	.	.	2	1	3
TOTAL	457	964	1992	665	185	168	66	48	35	8	6
MEAN HS (M) = 1.0	LARGEST HS (M) = 8.3		MEAN TP (SEC) = 4.3		NO. OF CASES = 4311.						

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	973	1338	344	74	14	5					2748
0.50-0.99		1274	2178	214	65	23	1	1			3756
1.00-1.49			2128	17	39	40	4	1	2		2231
1.50-1.99			253	470	10	47	17	4	2	1	804
2.00-2.49				322		35	32	9	5		403
2.50-2.99				72	38	19	38	6	4		177
3.00-3.49					40	3	20	16	1		80
3.50-3.99					9	1	2	24	4		40
4.00-4.49					1	2		10	13		26
4.50-4.99						1			7	1	9
5.00-5.49									1	1	2
5.50-5.99										1	1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	973	2612	4903	1169	216	176	114	71	39	4	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9630.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1028	1555	352	79	17	6		1	1		3039
0.50-0.99		1432	1078	128	49	26	1	1			2715
1.00-1.49			620	2	18	28	5	2			675
1.50-1.99			64	95	2	14	6	1	1		183
2.00-2.49				49		1	3	2	2		57
2.50-2.99				5	2	2	2		1		12
3.00-3.49								1			1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1028	2987	2114	358	88	77	17	8	5	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6257.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	844	1186	232	66	20	2					2350
0.50-0.99		1248	295	70	38	8					1659
1.00-1.49			136	2	6	1					168
1.50-1.99			9			3	5	1			18
2.00-2.49							4				4
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	844	2434	672	138	64	35	10	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3933.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	725	858	116	44	9						1752
0.50-0.99		1053	318	39	28	9					1447
1.00-1.49			174		4	6					184
1.50-1.99			23	4			1				28
2.00-2.49											0
2.50-2.99							3				3
3.00-3.49								1			1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	725	1911	631	87	41	15	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3201.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	801	688	132	59	14	5	1	1	.	.	1700
0.50-0.99	.	1194	986	32	18	9	1	.	.	.	2237
1.00-1.49	.	.	96	1	1	1	1	.	.	.	690
1.50-1.99	.	.	.	39	.	2	1	.	.	.	138
2.00-2.49	.	.	.	4	.	.	.	1	.	.	5
2.50-2.99	.	.	.	2	2	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	801	1882	1896	137	35	18	3	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4471.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	613	797	54	39	14	3	.	.	.	.	1520
0.50-0.99	.	790	1006	25	16	3	.	.	.	.	1840
1.00-1.49	.	.	1012	2	5	1	1	.	.	.	1021
1.50-1.99	.	.	141	275	.	.	.	.	1	.	417
2.00-2.49	.	.	.	93	2	.	.	.	.	.	93
2.50-2.99	.	.	.	5	.	.	.	.	.	.	7
3.00-3.49	0
3.50-3.99	1	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	613	1587	2213	437	34	11	1	1	1	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4589.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	791	1040	152	57	22	5	.	.	.	.	2067
0.50-0.99	.	889	1197	49	12	10	.	.	.	.	2157
1.00-1.49	.	.	1183	25	2	7	1	1	.	.	1219
1.50-1.99	.	.	63	379	.	2	.	.	.	.	444
2.00-2.49	.	.	.	126	.	.	.	1	.	.	127
2.50-2.99	.	.	.	3	9	.	.	.	.	.	12
3.00-3.49	4	.	.	.	.	.	4
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	791	1929	2595	639	50	25	1	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 5651.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	840	1407	176	71	18	16	2	.	.	.	2530
0.50-0.99	.	1660	478	32	18	14	1	2	.	.	2225
1.00-1.49	.	.	578	39	4	4	1	.	.	.	626
1.50-1.99	.	.	94	151	1	.	.	.	1	.	247
2.00-2.49	.	.	6	66	.	.	.	.	.	.	72
2.50-2.99	.	.	.	4	11	.	.	.	.	.	15
3.00-3.49	1	.	.	.	.	1
3.50-3.99	1	.	.	.	1	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	840	3067	1332	383	52	36	4	2	2	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 5357.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1515	1885	218	103	26	23	2	2	1	.	3770
0.50-0.99	.	2229	207	38	41	19	1	2	.	.	2539
1.00-1.49	.	.	809	2	6	14	1	.	.	.	832
1.50-1.99	.	.	137	5	.	5	1	.	.	.	143
2.00-2.49	.	.	3	.	.	.	.	.	2	.	11
2.50-2.99	1	1	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1515	4114	1374	148	73	61	5	2	4	1	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 6833.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1337	1903	170	99	34	10	.	.	.	.	3553
0.50-0.99	.	2320	893	47	43	22	3	1	.	.	3329
1.00-1.49	.	.	928	.	6	8	.	.	.	.	942
1.50-1.99	.	.	391	35	.	1	2	1	.	.	430
2.00-2.49	.	.	3	33	.	.	.	2	.	.	38
2.50-2.99	1	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	2	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1337	4223	2385	214	83	41	5	5	0	2	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 7764.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1248	1711	250	128	26	12	.	.	.	.	3375
0.50-0.99	.	3366	1371	89	82	44	2	.	.	.	4954
1.00-1.49	.	.	1482	2	11	19	3	.	2	.	1523
1.50-1.99	.	.	589	63	.	3	2	4	1	.	665
2.00-2.49	.	.	.	41	.	.	1	.	.	.	42
2.50-2.99	.	.	.	10	.	.	.	.	1	.	11
3.00-3.49	1	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1248	5077	3692	333	119	78	8	11	4	1	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 9894.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	934	855	214	109	41	18	.	.	.	.	2171
0.50-0.99	.	1964	979	99	80	57	9	3	.	.	3191
1.00-1.49	.	.	1019	5	22	35	5	4	.	.	1090
1.50-1.99	.	.	371	97	1	6	4	10	3	.	492
2.00-2.49	.	.	2	38	.	2	2	2	6	1	53
2.50-2.99	.	.	.	2	.	.	1	3	1	.	7
3.00-3.49	0
3.50-3.99	2	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	934	2819	2585	350	144	118	21	22	10	3	0

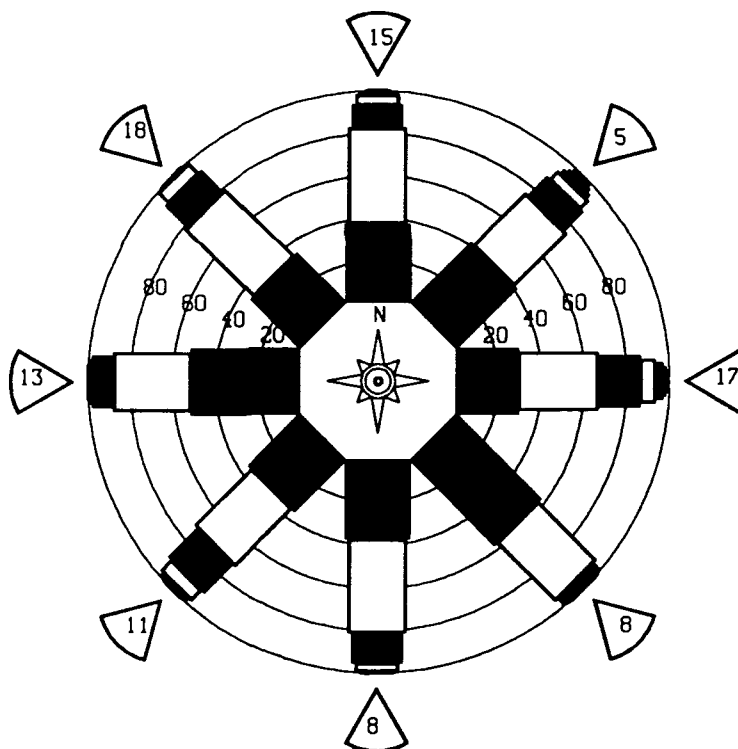
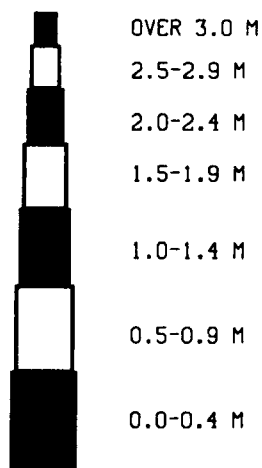
MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 6563.

STATION S14 46.95N 91.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1507	1794	341	122	36	15	3	1	.	.	3815
0.50-0.99	.	2343	1456	142	72	36	3	2	.	.	4053
1.00-1.49	.	.	1286	26	25	34	5	4	.	.	1378
1.50-1.99	.	.	263	207	9	17	7	4	1	.	508
2.00-2.49	.	.	1	106	3	10	8	4	2	.	134
2.50-2.99	.	.	.	14	14	5	7	3	1	.	45
3.00-3.49	6	3	3	3	.	.	16
3.50-3.99	1	2	1	4	.	.	8
4.00-4.49	1	.	2	.	.	5
4.50-4.99	1	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1507	4137	3347	617	166	123	34	23	9	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.

STATION 14
46.95N, 91.57 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S14 (46.95N 91.57W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.8	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.9	1.1	1.0	0.8
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1975	1.0	0.8	0.7	0.9	0.6	0.5	0.5	0.5	0.6	0.8	0.9	0.7	0.8
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1982	1.0	0.8	1.0	0.7	0.7	0.4	0.3	0.3	0.6	0.7	0.8	0.9	0.7
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
MEAN	0.8	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S14 (46.95N 91.57W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.2	2.7	4.7	4.4	2.8	2.3	1.2	1.6	1.6	2.7	4.2	3.0	
1957	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1958	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1959	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1960	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1961	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1962	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1963	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1964	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1965	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1966	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1967	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1968	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1969	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1970	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1971	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1972	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1973	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1974	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1975	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1976	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1977	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1978	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1979	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1980	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1981	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1982	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1983	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1984	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1985	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1986	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	
1987	2.2	2.0	4.4	3.7	2.3	1.5	1.8	1.4	1.8	2.7	4.2	3.0	

32 YR. STATISTICS FOR WIS STATION S14

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	0.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	8.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	62.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	3087	3056	263	183	116	43	7	2	.	.	6757
0.50-0.99	.	3054	151	8	16	47	19	19	.	.	3318
1.00-1.49	.	.	579	3	3	4	10	11	6	3	619
1.50-1.99	.	.	106	1	1	4	3	4	2	5	126
2.00-2.49	.	.	5	4	.	1	.	1	.	.	11
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	.	.	.	2	.	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	3087	6110	1104	204	136	99	39	37	12	9	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 10146.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	507	558	36	34	19	6	.	.	1	1	1160
0.50-0.99	.	428	161	11	7	16	2	2	1	.	629
1.00-1.49	.	.	96	25	7	1	1	1	4	.	135
1.50-1.99	.	.	11	38	4	1	1	.	.	.	55
2.00-2.49	.	.	.	4	8	4	.	.	.	.	16
2.50-2.99	.	.	.	2	.	.	3	.	.	.	3
3.00-3.49	1	.	5	.	.	6
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	507	986	304	114	46	29	7	8	5	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 1887.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	833	662	83	53	27	11	.	.	.	.	1669
0.50-0.99	.	513	311	6	5	13	3	3	.	.	854
1.00-1.49	.	.	119	60	6	1	2	3	2	.	193
1.50-1.99	.	.	16	35	14	2	.	.	.	.	67
2.00-2.49	.	.	.	17	12	3	1	.	.	.	33
2.50-2.99	.	.	.	1	.	4	3	1	1	1	11
3.00-3.49	1	3	1	.	.	5
3.50-3.99	1	.	2	1	.	4
4.00-4.49	1	1	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	833	1175	529	172	64	36	12	9	5	3	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2665.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	622	627	49	38	17	9	.	.	.	.	1362
0.50-0.99	.	614	749	36	8	11	1	3	.	.	1386
1.00-1.49	.	.	858	1	2	1	1	.	2	.	900
1.50-1.99	.	.	62	311	7	1	.	.	.	.	381
2.00-2.49	.	.	.	203	17	4	.	.	.	.	224
2.50-2.99	.	.	.	14	42	5	2	.	.	.	63
3.00-3.49	34	10	.	.	.	1	45
3.50-3.99	2	10	3	.	1	1	17
4.00-4.49	4	5	1	1	.	11
4.50-4.99	1	1	1	.	3
5.00-5.49	2	1	1	.	4
5.50-5.99	1	1	.	1
6.00-6.49	1	1	1	2
6.50-6.99	1	1	1
7.00+	4	.	4
TOTAL	622	1241	1718	602	128	56	15	6	8	8	

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 4132.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1352	1565	89	72	32	9	1				3120
0.50-0.99		1391	2171	12	12	16	7	1	3		3603
1.00-1.49			2203	12				2	4		2221
1.50-1.99			104	667	5				1		777
2.00-2.49				436	2						438
2.50-2.99				29	94	1					124
3.00-3.49					65						65
3.50-3.99					6	10	1				17
4.00-4.49						3					3
4.50-4.99						1					1
5.00-5.49											0
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1352	2956	4567	1218	216	40	9	3	9	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 9708.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1452	1788	69	36	17	8		1	1		3372
0.50-0.99		1394	1221		7	16	7	3	2		2650
1.00-1.49			779				2				781
1.50-1.99			38	163							201
2.00-2.49				59							59
2.50-2.99				2	4						6
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1452	3182	2107	260	28	24	9	4	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 6617.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1110	1368	72	29	9	8					2596
0.50-0.99		1434	333		6	14	4	2			1793
1.00-1.49			135	1		1					137
1.50-1.99			11								12
2.00-2.49				2							2
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1110	2802	551	34	15	23	4	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 4254.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	995	1191	27	23	17	8					2261
0.50-0.99		860	55		3	4	1				923
1.00-1.49			88				1				89
1.50-1.99			3								3
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	995	2051	173	23	20	12	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 3069.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1048	1290	54	25	20	11		1	.	.	2449
0.50-0.99	.	1496	88	.	2	4	1	1	.	.	1592
1.00-1.49	.	.	272	.	.	.	.	.	.	.	272
1.50-1.99	.	.	6	.	.	.	.	.	.	.	6
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1048	2786	420	27	22	15	1	2	0	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.1		MEAN TP (SEC) = 2.9		NO. OF CASES = 4046.						

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	788	832	18	19	16	3	.	.	.	.	1676
0.50-0.99	.	1722	547	.	3	3	.	.	.	.	2275
1.00-1.49	.	.	449	.	.	.	1	.	.	.	450
1.50-1.99	.	.	121	4	.	.	.	.	.	1	126
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	788	2554	1135	25	19	6	1	0	0	1	
MEAN HS(M) = 0.6	LARGEST HS(M)=		2.2	MEAN TP(SEC)=		3.1	NO. OF CASES=		4239.		

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	970	796	50	28	11	8	.	.	.	.	1863
0.50-0.99	.	1789	665	.	1	4	2	.	1	.	2462
1.00-1.49	.	.	427	.	.	.	.	.	.	.	427
1.50-1.99	.	.	135	4	.	.	.	.	.	.	139
2.00-2.49	.	.	.	5	.	.	.	.	.	.	5
2.50-2.99	5
3.00-3.49	5
3.50-3.99	5
4.00-4.49	5
4.50-4.99	5
5.00-5.49	5
5.50-5.99	5
6.00-6.49	5
6.50-6.99	5
7.00+	5
TOTAL	970	2585	1277	37	12	12	2	0	1	0	5484
MEAN HS(M) = 0.6	LARGEST HS(M)=		2.3	MEAN TP(SEC)=		3.1	NO. OF CASES=		4584.		

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =247.9
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1197	1053	40	29	18	10	1	1	2	.	2348
0.50-0.99	.	1784	251	.	.	4	.	1	.	.	2043
1.00-1.49	.	.	488	.	.	.	.	.	.	.	488
1.50-1.99	.	.	75	6	.	.	.	.	.	1	82
2.00-2.49	.	.	.	8	.	.	.	.	.	.	8
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1197	2837	854	44	18	14	1	2	2	1	4655
MEAN HS (M) = 0.5	LARGEST HS (M) =		2.9	MEAN TP (SEC) =		3.0	NO. OF CASES =		4655		

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1957	1879	77	64	19	14	2	1	1	.	4011
0.50-0.99	.	2424	148	1	.	6	.	1	.	.	2582
1.00-1.49	.	.	697	.	.	.	.	1	2	.	700
1.50-1.99	.	.	115	.	.	.	.	.	.	.	115
2.00-2.49	.	.	1	7	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1957	4303	1038	72	19	20	2	2	3	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 6939.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1756	2434	67	43	37	17	2	1	1	.	4356
0.50-0.99	.	3614	409	.	1	5	1	1	1	.	4032
1.00-1.49	.	.	1452	.	.	.	.	.	.	.	1452
1.50-1.99	.	.	205	3	.	.	.	.	.	.	208
2.00-2.49	.	.	6	11	.	.	.	.	.	.	17
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1756	6048	2139	58	38	22	3	1	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 9418.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1653	1752	91	80	34	23	2	.	.	.	3635
0.50-0.99	.	4009	1618	.	3	17	.	5	5	.	5657
1.00-1.49	.	.	1532	.	.	.	1	6	1	1	1541
1.50-1.99	.	.	675	64	.	.	.	.	.	.	740
2.00-2.49	.	.	1	45	.	.	.	.	.	.	46
2.50-2.99	.	.	.	6	.	.	.	.	.	.	6
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1653	5761	3917	195	37	40	3	11	6	2	

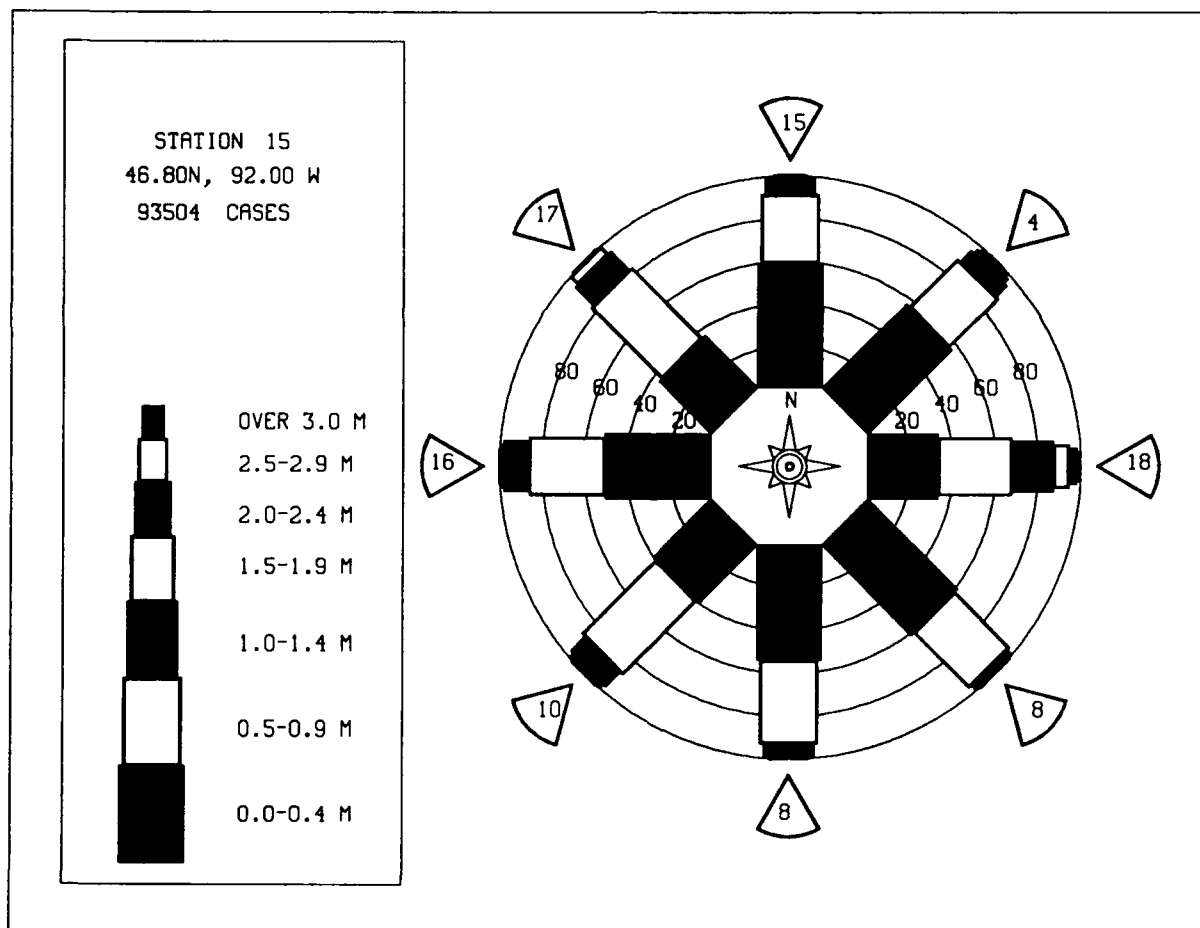
MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 10878.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1360	1414	96	98	69	43	4	1	.	.	3085
0.50-0.99	.	2172	410	2	9	28	14	8	3	.	2646
1.00-1.49	.	.	760	3	1	1	3	6	4	1	779
1.50-1.99	.	.	156	8	1	.	.	2	3	2	172
2.00-2.49	.	.	.	8	.	.	.	.	1	.	9
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1360	3586	1422	119	80	72	21	17	11	3	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 6267.

STATION S15 46.80N 92.00W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	2069	2227	118	86	48	24	1	5	2	4573
0.50-0.99	.	2870	929	3	8	21	6	3	.	3844
1.00-1.49	.	.	1094	14	1	1	2	2	.	1117
1.50-1.99	.	.	184	130	3	.	.	.	1	318
2.00-2.49	.	.	1	81	4	1	.	.	.	87
2.50-2.99	.	.	.	6	14	1	.	.	.	21
3.00-3.49	9	1	.	.	.	10
3.50-3.99	2	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2069	5097	2326	320	87	51	9	8	4	1
MEAN HS(M)=	0.6	LARGEST HS(M)=	9.1	MEAN TP(SEC)=	3.2	TOTAL CASES=	93504			



MEAN HS(METERS) BY MONTH AND YEAR													
WIS STATION S15 (46.80N 92.00W)													
MONTH													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.6	0.7	0.8	0.7	0.7	0.5	0.4	0.5	0.5	0.8	1.0	0.9	0.7
1957	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.7	1.0	0.7	0.6
1958	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.7	1.0	0.7	0.6
1959	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.7	1.0	0.7	0.6
1960	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1961	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1962	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1963	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1964	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1965	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1966	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1967	1.0	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1968	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1969	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1970	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1971	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1972	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1973	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1974	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1975	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1976	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1977	0.6	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1978	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1979	0.6	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1980	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1981	0.8	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1982	0.9	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1983	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1984	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1985	0.8	0.7	1.0	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1986	0.8	0.7	0.8	0.7	0.7	0.4	0.4	0.4	0.4	0.6	0.9	0.7	0.6
1987	0.6	0.7	0.9	0.5	0.5	0.4	0.4	0.3	0.3	0.6	0.7	0.6	0.5
MEAN	0.7	0.7	0.8	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.7	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR												
WIS STATION S15 (46.80N 92.00W)												
MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.1	2.6	3.7	3.9	2.3	2.1	1.2	1.6	1.3	2.1	3.2	3.1
1957	2.3	1.9	3.9	3.8	2.8	1.6	1.9	1.2	1.4	1.8	2.2	2.4
1958	2.1	3.4	2.1	3.6	2.5	1.3	1.7	1.3	1.8	2.0	5.8	2.1
1959	2.3	1.9	2.0	1.6	2.4	1.8	1.1	1.3	2.2	2.1	2.8	7.5
1960	1.8	2.4	2.7	4.0	2.5	1.5	1.2	2.1	1.5	1.9	9.1	2.0
1961	2.2	2.3	2.6	2.0	3.3	1.1	1.5	0.9	2.2	1.6	1.6	7.7
1962	2.4	2.6	4.3	2.5	2.1	2.3	1.1	1.5	1.1	1.8	1.9	2.1
1963	1.6	3.0	2.3	2.1	1.8	2.1	1.0	1.5	2.2	1.6	2.2	2.6
1964	3.3	3.3	2.1	2.4	1.8	1.6	1.3	2.4	1.1	1.9	2.6	8.8
1965	3.8	3.1	2.7	2.1	1.3	1.6	1.1	1.1	1.8	3.4	3.3	2.2
1966	2.3	2.8	4.1	1.3	1.7	1.5	1.1	1.3	2.2	2.9	8.8	8.8
1967	4.3	2.1	2.1	2.1	2.4	2.0	1.1	1.0	3.5	2.5	1.6	0.0
1968	2.1	1.9	1.8	2.3	1.6	1.5	1.6	1.5	1.3	2.0	2.1	3.3
1969	2.1	2.1	1.9	2.2	1.5	1.9	1.5	1.8	2.2	1.7	1.6	2.0
1970	1.6	1.8	3.1	2.3	2.7	1.7	1.3	1.2	1.5	1.7	2.6	3.5
1971	2.3	3.0	2.2	2.1	1.9	1.4	1.3	1.2	1.1	2.6	2.3	3.1
1972	3.5	2.3	2.9	2.5	2.3	1.6	1.0	1.1	1.6	3.5	3.1	1.1
1973	2.3	1.4	2.1	1.7	1.7	1.2	0.9	0.9	1.7	2.1	1.1	1.9
1974	2.1	2.1	2.8	2.2	1.9	1.1	1.5	2.1	1.1	1.6	3.2	2.2
1975	3.3	2.6	3.9	2.6	1.7	1.6	1.0	1.4	1.1	1.6	3.1	2.2
1976	2.3	2.5	3.5	2.6	1.5	2.8	0.9	0.9	1.2	1.4	1.4	2.1
1977	1.6	3.6	4.7	2.1	1.4	1.1	0.8	0.9	2.2	2.3	2.7	3.6
1978	1.9	1.6	1.7	1.9	1.9	1.1	1.1	1.6	3.1	1.5	2.1	2.3
1979	2.1	2.8	2.3	2.3	1.7	1.3	1.1	1.3	1.9	1.4	1.6	1.1
1980	2.5	2.2	1.7	1.7	2.0	2.3	1.0	1.3	1.6	2.0	1.7	1.1
1981	1.6	2.0	3.8	1.7	1.9	1.4	1.1	1.5	1.9	1.8	1.6	1.1
1982	3.7	2.2	3.3	2.1	1.7	1.4	1.1	1.0	1.1	2.1	2.1	3.3
1983	2.1	2.3	3.4	2.2	2.1	1.6	1.2	1.2	1.6	3.1	2.4	4.3
1984	1.8	2.3	2.5	2.4	1.6	1.7	0.9	1.2	1.9	3.3	1.9	2.3
1985	2.9	2.0	2.4	2.2	1.7	1.4	1.1	1.4	1.6	2.7	3.1	2.8
1986	2.6	2.1	2.6	2.2	1.9	1.2	2.2	0.8	1.7	1.7	2.9	2.2
1987	1.9	3.4	2.9	1.8	2.3	1.3	1.6	1.2	1.2	1.9	2.1	1.8

32 YR. STATISTICS FOR WIS STATION S15

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.4
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.0
LARGEST WAVE HS (METERS)	9.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	73.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	60112818

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2779	3075	363	237	118	55	3	1	.	.	6631
0.50-0.99	.	2974	223	56	64	50	21	14	1	.	3403
1.00-1.49	.	.	515	21	11	22	19	18	4	3	613
1.50-1.99	.	.	137	4	.	4	8	9	7	2	171
2.00-2.49	.	.	10	3	2	2	2	2	3	5	29
2.50-2.99	.	.	.	2	.	.	.	.	2	1	4
3.00-3.49	1	1
3.50-3.99	2	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2779	6049	1248	323	195	133	53	44	17	13	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 10164.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	419	427	77	42	17	4	.	.	2	.	986
0.50-0.99	.	324	171	10	11	20	1	1	1	.	540
1.00-1.49	.	.	113	16	.	2	3	1	1	.	136
1.50-1.99	.	.	14	32	5	1	1	1	1	.	55
2.00-2.49	.	.	.	27	4	1	1	.	.	.	32
2.50-2.99	.	.	.	1	7	3	1	.	.	.	12
3.00-3.49	3	3	1	.	.	.	6
3.50-3.99	1	2	.	.	.	3
4.00-4.49	1	1	2	.	.	4
4.50-4.99	1	.	3	.	.	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	1	0
6.50-6.99	1
7.00+	0
TOTAL	419	751	375	128	47	37	9	8	4	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 1673.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	751	597	133	69	26	12	.	.	.	.	1588
0.50-0.99	.	453	353	22	14	21	4	1	.	.	868
1.00-1.49	.	.	199	32	4	3	5	1	1	.	245
1.50-1.99	.	.	23	58	16	1	1	1	1	.	99
2.00-2.49	.	.	1	26	9	1	1	1	.	.	39
2.50-2.99	.	.	.	4	12	3	.	.	.	.	19
3.00-3.49	1	5	1	.	1	.	8
3.50-3.99	1	2	1	.	1	5
4.00-4.49	3	.	.	1	4
4.50-4.99	2	1	.	.	3
5.00-5.49	2	.	.	2
5.50-5.99	1	1	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	751	1050	709	211	82	46	18	8	4	3	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 2710.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	599	576	88	57	19	7	.	.	.	.	1346
0.50-0.99	.	867	932	14	23	23	4	4	.	.	1867
1.00-1.49	.	.	666	40	5	14	11	1	2	.	739
1.50-1.99	.	.	201	159	10	4	4	1	2	.	377
2.00-2.49	.	.	.	109	6	5	1	4	2	.	127
2.50-2.99	.	.	.	33	22	6	3	3	2	2	68
3.00-3.49	.	.	.	3	9	10	.	.	1	1	24
3.50-3.99	7	3	.	.	1	11
4.00-4.49	2	6	.	1	2	11
4.50-4.99	1	1	1	1	4
5.00-5.49	1	2	3	.	6
5.50-5.99	1	1	2
6.00-6.49	1	.	1
6.50-6.99	1	.	1
7.00+	4
TOTAL	599	1443	1887	415	94	74	31	16	18	11	

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4308.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1364	1140	166	115	39	10					2834
0.50-0.99		2486	2272	10	33	27	8	3	2	1	4842
1.00-1.49			1428	10	3	13	17	3	7		1481
1.50-1.99			411	328	4	1	5	5	2		756
2.00-2.49				178	1			3			182
2.50-2.99				75	6			1	1		83
3.00-3.49				5	13						18
3.50-3.99					3	1	1				5
4.00-4.49					1						1
4.50-4.99											0
5.00-5.49											0
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1364	3626	4277	721	103	52	31	15	13	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 9556.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1478	1420	161	63	23	9	1	1	1		3157
0.50-0.99		2029	1105	5	19	32	6	4			3200
1.00-1.49			481			5	4	3	3		496
1.50-1.99			88	71			1		1		161
2.00-2.49				16							16
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1478	3449	1835	156	42	46	12	8	5	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 6582.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1117	1282	106	55	12	9					2581
0.50-0.99		1395	249		8	17	6	2			1677
1.00-1.49			100			3		1			104
1.50-1.99			9	1			1				11
2.00-2.49				1							1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1117	2677	464	57	20	29	7	3	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.0 NO. OF CASES= 4097.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	937	1007	54	29	23	7					2057
0.50-0.99		851	74		4	6	1				920
1.00-1.49			3				1				75
1.50-1.99				1							3
2.00-2.49											1
2.50-2.99											1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	937	1858	189	31	27	13	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 2.8 NO. OF CASES= 2865.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	938	1110	71	42	24	7	.	.	.	.	2192
0.50-0.99	.	1287	58	.	2	8	1	.	.	.	1356
1.00-1.49	.	.	181	.	.	.	.	1	.	.	182
1.50-1.99	.	.	4	.	.	.	.	.	.	.	4
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	938	2397	314	44	26	15	1	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 3500.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	745	952	25	22	13	2	.	.	.	.	1759
0.50-0.99	.	1480	322	.	5	5	.	.	.	.	1812
1.00-1.49	.	.	389	.	.	.	1	.	.	.	390
1.50-1.99	.	.	55	4	.	.	.	.	.	.	59
2.00-2.49	.	.	.	3	.	.	.	.	.	1	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	745	2432	791	29	18	7	1	0	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3769.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	910	872	58	45	10	9	.	.	.	.	1904
0.50-0.99	.	1871	680	.	2	6	1	1	.	.	2561
1.00-1.49	.	.	524	.	.	1	.	.	1	.	526
1.50-1.99	.	.	151	6	.	.	.	.	.	.	157
2.00-2.49	.	.	.	5	.	.	.	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	910	2743	1413	56	12	16	1	1	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4825.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	997	912	41	29	12	11	2	.	.	.	2004
0.50-0.99	.	1769	934	.	3	8	1	1	1	.	2717
1.00-1.49	.	.	736	.	.	.	.	.	.	.	736
1.50-1.99	.	.	199	81	.	.	.	.	.	.	280
2.00-2.49	.	.	.	39	.	.	.	.	.	.	39
2.50-2.99	.	.	.	4	1	.	.	.	.	.	5
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	997	2681	1910	153	18	19	3	1	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 5417.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1498	1112	89	56	10	7	1	.	1	.	2774
0.50-0.99	.	2142	1391	.	2	6	1	.	.	.	3542
1.00-1.49	.	.	1167	.	.	.	.	.	1	.	1168
1.50-1.99	.	.	319	188	.	.	.	.	2	.	509
2.00-2.49	.	.	.	108	5	.	.	.	.	1	109
2.50-2.99	.	.	.	20	1	.	.	.	.	.	25
3.00-3.49	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1498	3254	2966	372	18	13	3	0	4	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 7608.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1432	1704	77	50	33	11	.	.	.	.	3307
0.50-0.99	.	3091	2168	.	4	7	2	2	.	.	5274
1.00-1.49	.	.	2311	.	.	.	.	.	.	.	2311
1.50-1.99	.	.	680	545	.	.	.	.	.	.	1225
2.00-2.49	.	.	.	228	.	.	.	.	.	1	229
2.50-2.99	.	.	.	17	9	.	.	.	.	.	26
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1432	4795	5236	840	47	18	2	2	0	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 11576.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1386	1454	124	95	32	25	2	.	.	.	3118
0.50-0.99	.	3266	1276	2	12	22	2	4	2	.	4586
1.00-1.49	.	.	1224	1	.	1	1	7	2	1	1237
1.50-1.99	.	.	452	58	.	.	.	.	1	2	513
2.00-2.49	.	.	1	41	1	.	.	.	1	1	43
2.50-2.99	.	.	.	7	1	.	.	.	.	.	8
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1386	4720	3077	204	46	48	5	11	5	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 8897.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

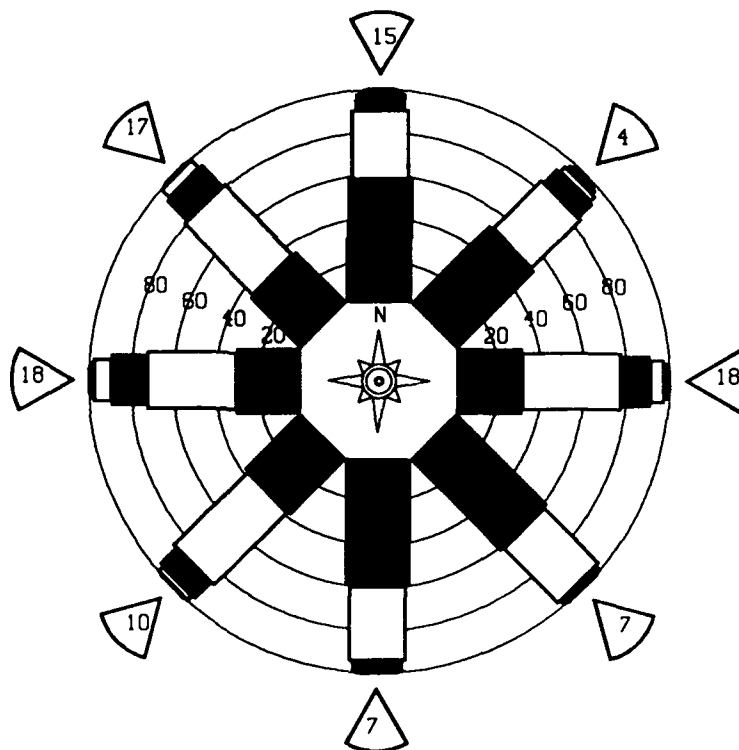
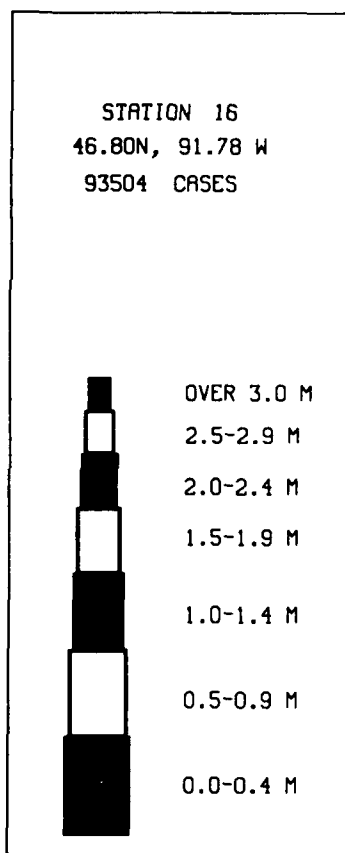
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1190	1390	131	129	71	41	2	1	.	.	2955
0.50-0.99	.	1987	360	23	31	39	9	7	1	.	2457
1.00-1.49	.	.	718	3	1	10	14	14	4	.	764
1.50-1.99	.	.	157	5	2	.	.	3	3	3	173
2.00-2.49	.	.	.	7	.	.	.	1	1	1	10
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1190	3377	1366	167	105	90	25	26	9	4	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5957.

STATION S16 46.80N 91.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1854	1903	177	114	49	23	1	.	.	.	4121
0.50-0.99	.	2827	1256	14	24	30	7	4	.	.	4162
1.00-1.49	.	.	1083	12	2	7	8	5	2	.	1119
1.50-1.99	.	.	291	154	3	.	2	2	2	.	454
2.00-2.49	.	.	1	79	2	.	.	1	.	1	84
2.50-2.99	.	.	.	16	6	1	.	.	.	.	23
3.00-3.49	3	1	.	.	.	.	4
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1854	4730	2808	389	89	63	19	12	4	1	93504

MEAN HS(M)= 0.6 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 3.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S16 (46.80N 91.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.7	0.8	0.8	0.7	0.5	0.4	0.5	0.6	0.8	1.0	1.0	0.7
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.8	0.7	0.8	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S16 (46.80N 91.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.9	2.2	3.3	4.3	2.1	2.0	1.1	1.3	1.7	2.4	4.6	3.0	
1957	2.9	1.9	4.3	2.6	3.4	1.7	1.9	1.0	1.7	1.8	2.6	2.5	
1958	2.7	1.8	3.4	2.3	1.6	1.5	1.3	2.2	2.4	2.4	3.9	2.3	
1959	2.5	2.4	2.1	2.0	2.3	2.0	1.5	1.3	2.7	2.7	3.3	7.3	
1960	2.2	2.7	2.1	4.0	2.1	1.6	1.2	1.8	1.6	2.4	8.7	2.1	
1961	2.9	2.1	2.4	2.1	3.6	1.7	2.0	1.1	1.5	1.8	2.0	2.1	
1962	2.2	2.2	3.9	2.1	1.7	1.9	0.9	1.3	1.8	2.2	2.4	2.5	
1963	1.1	2.5	2.3	1.8	1.7	1.8	1.2	1.2	1.6	1.1	2.2	3.8	
1964	3.0	2.2	2.7	2.7	2.2	1.8	1.1	2.0	2.2	2.5	2.1	2.5	
1965	3.7	2.6	2.9	1.8	1.5	1.5	1.0	1.2	1.7	2.2	3.3	2.9	
1966	2.4	2.3	3.1	3.1	2.0	1.5	1.3	1.2	1.8	2.2	2.5	2.1	
1967	4.8	2.1	1.9	2.2	2.8	1.7	1.4	1.3	1.5	2.2	2.0	2.0	
1968	2.1	2.7	1.9	2.9	1.8	1.4	2.0	1.8	1.4	1.9	2.3	3.3	
1969	2.0	1.8	1.9	2.5	1.5	1.6	1.5	2.4	1.3	1.1	1.8	2.1	
1970	1.9	2.0	2.8	2.4	2.2	1.6	1.3	1.3	1.8	2.2	2.2	1.1	
1971	2.3	3.0	2.3	2.0	2.2	1.4	1.4	1.0	1.1	2.2	2.2	2.2	
1972	2.8	1.4	3.2	2.3	1.9	1.4	1.1	1.0	1.6	2.2	4.0	2.7	
1973	1.9	1.4	1.8	1.4	1.4	1.1	1.1	0.8	1.5	2.2	1.8	1.1	
1974	2.6	1.7	2.4	2.0	1.7	1.9	1.7	1.3	1.6	1.1	3.5	2.3	
1975	4.1	2.8	5.1	2.4	1.8	1.4	1.4	1.7	1.9	1.9	4.0	1.9	
1976	2.0	2.6	4.3	2.3	1.7	3.0	0.9	1.0	1.5	1.1	1.8	1.8	
1977	2.0	4.0	5.8	1.7	2.0	1.3	1.1	1.1	2.5	2.2	2.4	3.3	
1978	1.9	1.5	1.6	1.7	1.7	1.1	1.0	3.4	2.6	1.1	1.9	2.0	
1979	1.7	2.4	1.9	2.0	1.4	1.4	1.3	1.2	1.6	1.1	1.8	1.1	
1980	2.2	1.9	2.6	1.6	1.7	1.9	1.1	1.2	1.9	2.2	1.6	2.2	
1981	1.7	2.1	2.3	1.9	1.9	1.9	0.9	1.1	2.5	1.1	1.8	1.1	
1982	3.1	1.9	2.9	2.1	1.5	1.9	0.9	1.0	1.4	1.1	2.0	2.1	
1983	2.2	2.2	3.0	1.8	1.8	1.4	1.1	1.4	1.8	1.1	2.7	2.2	
1984	1.9	2.1	2.5	2.9	2.0	2.3	1.4	1.2	1.6	2.2	2.0	2.2	
1985	2.4	2.3	4.7	2.1	1.5	2.0	0.9	1.5	1.9	2.3	2.7	2.2	
1986	1.7	2.2	2.6	2.2	2.1	1.1	1.1	0.9	1.7	2.3	3.3	1.1	
1987	1.7	2.8	2.6	1.7	1.9	1.5	1.3	1.0	1.2	1.9	2.0	2.2	

32 YR. STATISTICS FOR WIS STATION S16

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.4
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.1
LARGEST WAVE HS (METERS)	8.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	69.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	60112818

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2067	2107	305	155	65	32	.	1	.	.	4732
0.50-0.99	.	1368	2172	53	81	43	13	3	.	.	3733
1.00-1.49	.	.	1706	4	5	20	8	12	1	.	1756
1.50-1.99	.	.	96	408	4	6	11	5	4	2	536
2.00-2.49	.	.	1	262	34	3	2	3	1	2	271
2.50-2.99	.	.	.	23	11	3	2	5	5	2	74
3.00-3.49	2	2	.	1	3	4	19
3.50-3.99	4
4.00-4.49	0
4.50-4.99	2	2
5.00-5.49	0
5.50-5.99	1	1
6.00-6.49	0
6.50-6.99	1	1
7.00+	0
TOTAL	2067	3475	4280	905	202	106	36	30	14	14	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 10422.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	429	497	125	62	14	4	.	.	.	.	1131
0.50-0.99	.	440	357	33	36	29	1	.	1	.	897
1.00-1.49	.	.	166	29	4	10	2	1	3	.	215
1.50-1.99	.	.	25	39	5	.	5	1	3	.	78
2.00-2.49	.	.	3	21	7	3	4	2	.	.	37
2.50-2.99	.	.	.	4	5	3	1	2	.	.	15
3.00-3.49	.	.	.	1	3	2	1	.	.	1	8
3.50-3.99	1	1	.	1	1	3
4.00-4.49	4	.	1	.	5
4.50-4.99	2	1	1	.	4
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	1	.	1
7.00+	0
TOTAL	429	937	676	189	74	49	22	7	10	2	

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 2253.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	545	472	152	60	18	9	.	.	.	.	1256
0.50-0.99	.	330	333	45	17	17	3	1	.	.	740
1.00-1.49	.	.	195	51	15	10	4	1	.	.	266
1.50-1.99	.	.	12	78	17	2	5	1	2	.	117
2.00-2.49	.	.	.	31	13	6	4	3	3	.	60
2.50-2.99	.	.	.	4	22	4	3	1	1	.	35
3.00-3.49	3	2	1	.	.	6
3.50-3.99	5	4	1	.	1	11
4.00-4.49	2	.	2	.	4
4.50-4.99	2	.	.	.	.	2
5.00-5.49	3	1	1	5
5.50-5.99	1	1	2
6.00-6.49	0
6.50-6.99	0
7.00+	1	1
TOTAL	545	802	692	269	86	58	27	12	10	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2358.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	587	711	244	87	17	4	.	.	.	.	1650
0.50-0.99	.	1040	493	100	52	34	5	2	.	.	1726
1.00-1.49	.	.	312	81	66	51	20	3	.	.	533
1.50-1.99	.	.	75	55	29	50	19	5	2	.	235
2.00-2.49	.	.	13	22	9	17	19	13	4	.	97
2.50-2.99	.	.	.	2	14	10	5	13	5	1	50
3.00-3.49	3	10	2	2	6	2	23
3.50-3.99	4	5	1	1	.	10
4.00-4.49	2	1	2	1	6
4.50-4.99	3	2	1	.	6
5.00-5.49	2	1	3
5.50-5.99	5	1	6
6.00-6.49	1	.	1
6.50-6.99	1	1
7.00+	3	3
TOTAL	587	1751	1137	347	190	180	78	41	29	10	

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 4087.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1552	2178	448	214	47	8	.	1	.	1	4448
0.50-0.99	.	3428	336	150	132	55	4	2	2	1	4110
1.00-1.49	.	.	712	50	70	88	40	9	7	.	976
1.50-1.99	.	.	201	3	10	78	56	14	6	.	368
2.00-2.49	.	.	32	3	1	3	20	27	5	.	91
2.50-2.99	.	.	.	3	.	.	3	21	14	1	42
3.00-3.49	.	.	.	1	.	.	.	2	3	1	7
3.50-3.99	1	.	1
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1552	5606	1729	424	260	232	123	76	38	4	9409.

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 9409.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1516	1945	373	132	34	16	1	.	1	.	4018
0.50-0.99	.	2022	213	33	53	50	6	6	.	.	2383
1.00-1.49	.	.	255	3	6	23	9	1	4	.	301
1.50-1.99	.	.	29	.	.	6	3	.	1	.	39
2.00-2.49	1	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1516	3967	870	168	93	95	20	7	6	0	6313.

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 6313.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1065	1165	214	83	20	6	.	.	.	.	2553
0.50-0.99	.	1214	197	8	19	29	3	2	.	.	1472
1.00-1.49	.	.	80	1	1	2	4	3	.	1	92
1.50-1.99	.	.	5	.	.	.	3	.	.	.	8
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1065	2379	496	94	40	37	10	5	0	1	3867.

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 3867.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	838	1026	88	43	20	5	.	.	.	.	2020
0.50-0.99	.	898	86	4	5	10	1	.	.	.	1004
1.00-1.49	.	.	75	.	.	.	1	.	.	.	76
1.50-1.99	.	.	2	1	.	.	.	.	.	.	3
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	838	1924	252	48	25	15	2	0	0	0	2909.

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 2909.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	906	1127	90	62	24	6	.	.	.	.	2215
0.50-0.99	.	1242	63	3	5	12	.	.	.	.	1325
1.00-1.49	.	.	182	.	.	.	.	.	.	.	182
1.50-1.99	.	.	4	.	.	.	.	.	.	.	4
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	906	2369	339	68	29	18	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 3493.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	726	959	27	33	13	3	.	.	.	.	1761
0.50-0.99	.	1453	310	3	8	7	1	.	.	.	1782
1.00-1.49	.	.	366	.	.	1	1	.	.	.	368
1.50-1.99	.	.	50	4	.	.	.	1	.	.	55
2.00-2.49	.	.	.	3	.	.	.	.	.	.	3
2.50-2.99	1	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	726	2412	753	43	21	11	2	1	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 3718.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	774	944	69	45	14	6	.	1	1	.	1852
0.50-0.99	.	1855	594	1	6	2	.	.	1	.	2467
1.00-1.49	.	.	472	7	.	.	.	1	.	.	475
1.50-1.99	.	.	129	5	.	.	.	.	.	.	137
2.00-2.49	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	774	2799	1264	58	20	17	0	2	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4623.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	840	1155	53	33	10	12	1	.	.	.	2104
0.50-0.99	.	1504	1032	2	5	13	1	1	.	.	2558
1.00-1.49	.	.	848	3	.	1	.	.	1	.	853
1.50-1.99	.	.	157	164	.	.	.	.	.	.	321
2.00-2.49	.	.	.	73	.	.	.	.	.	.	73
2.50-2.99	.	.	.	5	8	.	.	.	.	.	13
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	840	2659	2090	280	26	28	2	1	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 5550.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1259	1751	85	59	13	4	.	.	1	.	3172
0.50-0.99	.	1238	1775	2	6	13	3	.	.	.	3037
1.00-1.49	.	.	1780	4	.	1	1	.	1	.	1787
1.50-1.99	.	.	118	593	.	.	.	.	.	.	712
2.00-2.49	.	.	.	305	.	.	.	.	1	.	306
2.50-2.99	.	.	.	17	62	.	.	.	.	.	79
3.00-3.49	24	1	.	.	.	1	25
3.50-3.99	1	.	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1259	2989	3758	980	106	19	4	0	4	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 8538.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1163	2081	79	47	20	6	.	.	.	.	3396
0.50-0.99	.	2231	1945	5	13	19	3	1	.	.	4217
1.00-1.49	.	.	2117	5	.	.	.	.	.	.	2125
1.50-1.99	.	.	235	743	.	.	2	1	.	.	978
2.00-2.49	.	.	1	441	.	.	.	1	.	.	443
2.50-2.99	.	.	.	22	68	.	.	.	.	1	91
3.00-3.49	.	.	.	1	14	.	.	.	.	.	15
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1163	4312	4377	1264	116	25	5	3	0	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 10543.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1088	1579	140	84	28	13	1	.	.	.	2933
0.50-0.99	.	3198	1319	17	27	35	3	.	1	.	4600
1.00-1.49	.	.	1918	21	2	4	1	6	3	.	1955
1.50-1.99	.	.	641	166	1	1	.	.	.	.	809
2.00-2.49	.	.	1	65	4	.	.	2	2	2	76
2.50-2.99	.	.	.	9	4	.	.	1	.	.	14
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1088	4777	4019	362	66	53	6	9	6	2	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 9725.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	897	995	121	85	42	20	.	1	.	.	2161
0.50-0.99	.	1340	950	27	42	32	5	2	.	.	2398
1.00-1.49	.	.	960	2	1	7	.	5	1	.	976
1.50-1.99	.	.	142	257	.	2	1	1	.	.	403
2.00-2.49	.	.	1	128	.	.	.	.	1	.	130
2.50-2.99	.	.	.	4	6	.	.	.	.	2	12
3.00-3.49	0
3.50-3.99	1	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	897	2335	2174	503	91	61	6	9	2	3	

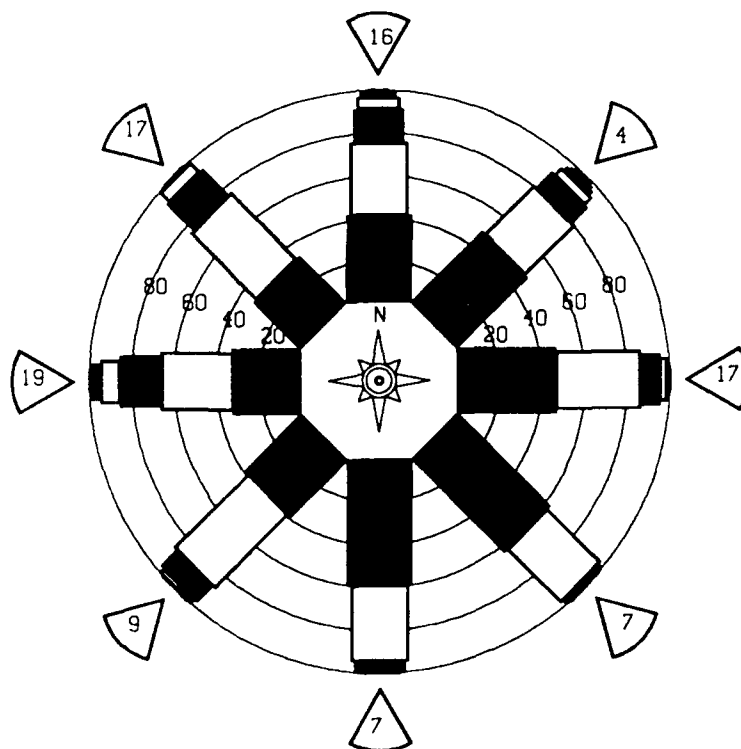
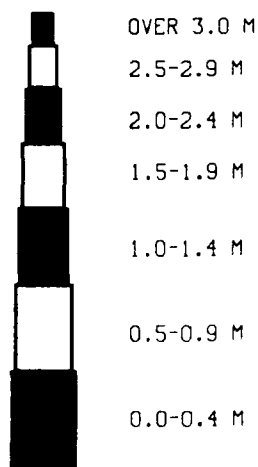
MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 5696.

STATION S17 46.80N 91.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1626	2069	262	129	40	16	5	2	.	.	4142
0.50-0.99	.	2481	1218	49	50	41	9	4	.	.	3846
1.00-1.49	.	.	1215	25	16	22	10	3	.	.	1293
1.50-1.99	.	.	192	252	6	14	5	2	.	.	479
2.00-2.49	.	.	5	136	9	2	1	4	.	.	157
2.50-2.99	22	2	1	.	.	.	40
3.00-3.49	6	1	1	.	.	.	8
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1626	4550	2892	600	143	99	31	18	8	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.

STATION 17
46.80N, 91.57 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S17 (46.80N 91.57W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.8	0.9	0.7	0.5	0.4	0.5	0.6	0.9	1.1	1.1	0.8
1957	1.0	0.8	0.8	0.8	0.7	0.5	0.4	0.4	0.6	0.6	1.0	0.8	0.7
1958	0.7	0.9	0.6	0.8	0.7	0.5	0.5	0.5	0.7	0.8	1.2	1.0	0.7
1959	0.9	0.8	0.7	0.6	0.7	0.5	0.4	0.4	0.7	0.8	1.0	1.0	0.7
1960	0.8	0.8	0.7	1.0	0.6	0.5	0.4	0.4	0.6	0.7	1.2	1.0	0.7
1961	0.9	0.8	0.9	0.7	0.6	0.5	0.4	0.3	0.5	0.5	0.6	0.7	0.6
1962	1.0	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.6	0.7	0.8	1.1	0.7
1963	1.0	0.9	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.6	0.9	1.1	0.7
1964	1.0	0.8	0.8	0.7	0.7	0.4	0.3	0.6	0.5	0.6	0.8	0.7	0.7
1965	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.5	0.7	0.8	1.1	0.7
1966	1.0	0.9	1.2	0.8	0.7	0.5	0.4	0.5	0.5	0.9	0.8	0.8	0.7
1967	1.1	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.5	0.8	0.8	0.8	0.7
1968	0.8	1.0	0.8	0.7	0.5	0.5	0.5	0.4	0.5	0.6	0.8	0.9	0.7
1969	0.9	0.7	0.7	0.6	0.6	0.6	0.4	0.5	0.5	0.7	0.8	0.7	0.6
1970	0.8	1.0	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.7	0.7	0.9	0.7
1971	1.0	1.1	0.8	0.7	0.6	0.4	0.4	0.3	0.4	0.6	0.8	0.8	0.7
1972	1.0	0.8	0.8	0.6	0.4	0.4	0.3	0.4	0.5	0.8	0.6	0.7	0.6
1973	0.7	0.8	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.6	0.6	0.5	0.5
1974	0.8	0.6	0.8	0.6	0.5	0.5	0.5	0.5	0.6	0.6	1.1	0.9	0.7
1975	1.0	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.9	0.7	0.7
1976	0.9	0.9	1.1	0.6	0.6	0.6	0.4	0.3	0.4	0.5	0.7	0.7	0.6
1977	0.7	1.0	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.6
1978	0.9	0.6	0.5	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1979	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1980	0.9	0.6	0.7	0.5	0.5	0.6	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1981	0.8	0.7	0.8	0.4	0.5	0.5	0.3	0.3	0.7	0.7	0.8	0.7	0.6
1982	1.0	0.8	0.9	0.5	0.5	0.4	0.3	0.3	0.5	0.7	0.8	0.8	0.7
1983	0.8	0.7	0.9	0.6	0.6	0.5	0.4	0.4	0.6	0.7	1.0	0.8	0.7
1984	0.8	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.8	0.8	0.8	0.8	0.7
1985	1.0	0.8	0.8	0.8	0.7	0.5	0.4	0.5	0.7	0.7	1.0	0.8	0.7
1986	0.9	0.6	0.8	0.8	0.8	0.4	0.4	0.4	0.6	0.6	1.0	0.8	0.7
1987	0.7	0.7	0.9	0.6	0.5	0.4	0.4	0.3	0.4	0.7	0.8	0.8	0.6
MEAN	0.9	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S17 (46.80N 91.57W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.1	2.0	3.0	4.1	2.4	2.3	1.1	1.3	2.0	2.7	4.5	3.1	
1957	2.6	2.4	4.4	3.4	2.8	2.3	1.9	1.3	2.1	1.7	2.8	3.0	
1958	2.1	2.7	1.7	3.2	2.4	1.9	1.7	1.8	2.4	2.7	5.8	2.9	
1959	2.8	2.8	2.5	2.4	2.4	2.3	1.7	1.5	2.3	3.0	3.3	7.0	
1960	2.3	3.3	2.7	3.8	1.8	2.0	1.2	1.5	1.8	2.8	8.3	2.6	
1961	2.3	2.1	2.6	2.6	3.5	1.7	2.2	1.3	1.7	2.1	2.2	2.3	
1962	2.2	2.0	4.6	2.3	1.7	1.5	1.1	1.6	2.1	2.6	2.8	3.1	
1963	2.5	2.6	2.7	2.0	1.8	1.5	1.3	1.2	1.6	1.9	2.3	4.2	
1964	3.0	2.1	2.6	3.1	2.6	2.1	1.2	1.7	2.6	3.1	2.3	2.1	
1965	3.2	3.1	3.3	2.0	1.7	1.8	1.1	1.1	2.0	2.6	3.5	3.4	
1966	2.8	2.2	5.0	2.7	2.2	1.6	1.2	1.1	2.1	3.1	2.2	2.5	
1967	4.9	2.1	2.0	2.2	3.1	1.8	1.5	1.6	2.2	2.7	2.2	2.3	
1968	2.0	3.1	2.4	2.7	1.8	1.7	2.1	1.8	1.7	2.0	2.9	3.1	
1969	2.3	2.3	2.4	2.6	1.5	1.6	1.5	2.9	1.4	2.0	2.1	2.5	
1970	2.0	2.3	3.2	2.9	2.1	2.0	1.5	1.4	2.1	2.6	2.4	2.9	
1971	2.6	2.3	2.5	2.1	2.1	1.4	1.6	1.0	1.2	2.3	2.6	2.4	
1972	2.9	2.3	3.1	2.6	1.7	1.6	1.3	1.1	1.6	2.4	3.9	2.6	
1973	2.1	1.9	2.1	1.4	1.4	1.1	1.2	0.8	1.5	2.7	2.1	2.3	
1974	2.8	2.1	2.9	2.2	1.6	1.7	2.0	1.5	1.7	1.8	3.3	2.7	
1975	3.9	3.2	5.2	2.2	1.7	1.4	1.6	1.9	1.7	2.1	4.0	2.3	
1976	2.1	3.1	4.2	2.2	1.7	2.9	1.0	1.2	1.7	2.0	2.2	2.3	
1977	2.3	5.1	5.8	1.7	2.0	1.6	1.5	1.5	2.6	2.5	3.0	2.9	
1978	2.4	2.1	2.0	2.1	1.3	1.2	0.9	1.2	2.2	2.0	2.3	2.1	
1979	1.6	2.0	2.1	1.8	1.3	1.7	1.4	1.2	1.7	1.8	2.1	2.3	
1980	2.7	2.1	3.2	2.1	1.4	1.9	1.2	1.4	2.2	2.4	1.6	2.6	
1981	2.0	2.0	1.7	2.0	2.3	0.9	0.9	3.0	1.8	2.1	1.1	2.6	
1982	3.0	1.9	3.5	2.4	1.2	2.2	1.2	1.1	1.4	2.0	2.4	3.3	
1983	2.1	2.7	2.8	2.2	1.6	1.2	1.2	1.6	2.1	2.1	3.3	2.9	
1984	2.2	2.1	3.1	3.4	2.3	2.5	1.6	1.3	1.6	2.4	2.3	2.6	
1985	2.4	2.7	7.5	2.4	1.5	2.3	0.9	1.8	2.1	2.4	2.3	2.7	
1986	3.3	2.1	2.6	2.6	2.4	1.1	1.5	1.1	1.8	2.3	4.1	2.2	
1987	2.2	2.5	2.4	2.0	1.8	1.7	1.3	1.1	1.6	2.4	2.2	2.6	

32 YR. STATISTICS FOR WIS STATION S17

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	8.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	61.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	60112815

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1953	1328	514	125	63	25	.	.	.	.	4008
0.50-0.99	.	2744	1774	231	120	69	13	1	.	.	4952
1.00-1.49	.	.	762	70	78	56	11	7	.	.	984
1.50-1.99	.	.	234	110	26	37	12	16	1	.	436
2.00-2.49	.	.	2	72	13	27	21	13	3	.	151
2.50-2.99	.	.	.	11	2	9	4	8	1	5	40
3.00-3.49	4	3	8	3	1	19
3.50-3.99	2	.	2	1	5
4.00-4.49	1	2	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1953	4072	3286	619	302	227	66	53	11	9	9928.

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 9928.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	397	394	158	56	14	4	.	.	.	.	1023
0.50-0.99	.	404	295	89	39	20	.	.	.	.	847
1.00-1.49	.	.	137	37	18	21	2	.	.	.	215
1.50-1.99	.	.	12	41	6	10	2	4	2	.	77
2.00-2.49	.	.	.	22	7	9	4	1	3	.	46
2.50-2.99	.	.	.	3	1	1	5	4	1	.	21
3.00-3.49	1	9	3	4	1	.	14
3.50-3.99	5	4	4	1	3	13
4.00-4.49	4	1	1	.	9
4.50-4.99	0
5.00-5.49	2	.	2
5.50-5.99	1	2	.	3
6.00-6.49	3	.	3
6.50-6.99	1	.	1
7.00+	2	2
TOTAL	397	798	602	248	92	79	24	15	14	5	2143.

MEAN HS(M) = 0.7 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 2143.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	466	392	207	41	16	6	.	.	.	.	1128
0.50-0.99	.	316	420	90	21	9	1	.	.	.	857
1.00-1.49	.	.	201	54	16	24	4	.	1	.	300
1.50-1.99	.	.	13	57	25	12	5	.	.	.	112
2.00-2.49	.	.	.	19	8	9	6	2	1	.	45
2.50-2.99	.	.	.	1	10	8	2	1	1	.	23
3.00-3.49	3	5	3	.	3	.	14
3.50-3.99	9	2	1	.	.	12
4.00-4.49	1	2	1	1	.	5
4.50-4.99	3	.	.	.	3
5.00-5.49	2	1	3
5.50-5.99	2	.	3
6.00-6.49	1	0
6.50-6.99	1
7.00+	0
TOTAL	466	708	841	262	99	83	28	5	11	3	2359.

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2359.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	467	495	202	39	7	.	.	.	.	.	1210
0.50-0.99	.	664	896	162	41	13	.	.	.	.	1776
1.00-1.49	.	.	528	90	50	33	6	2	.	.	709
1.50-1.99	.	.	131	133	51	36	8	2	.	.	361
2.00-2.49	.	.	.	73	24	51	11	3	.	.	162
2.50-2.99	.	.	.	10	29	25	21	6	4	.	95
3.00-3.49	5	23	13	11	3	.	55
3.50-3.99	1	8	2	13	3	.	27
4.00-4.49	3	5	5	2	.	15
4.50-4.99	2	2	1	5
5.00-5.49	4	8	.	12
5.50-5.99	2	.	2
6.00-6.49	1	1	2
6.50-6.99	1	1	2
7.00+	1	4	5
TOTAL	467	1159	1757	507	208	192	66	48	27	7	4171.

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 4171.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 9621.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 6565.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 3.1 NO. OF CASES = 3884.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2720.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	826	1007	157	66	12	3	.	.	1	.	2072
0.50-0.99	.	916	52	35	24	7	1	.	.	.	1034
1.00-1.49	.	.	81	.	1	2	1	.	.	.	85
1.50-1.99	.	.	4	.	.	1	1	.	.	.	6
2.00-2.49	.	.	1	1	.	.	.	1	.	.	3
2.50-2.99	1	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	826	1923	295	102	37	13	3	1	1	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 2999.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	669	1125	97	44	18	4	.	.	.	.	1957
0.50-0.99	.	1209	595	24	18	6	.	.	.	.	1852
1.00-1.49	.	.	589	5	.	6	1	.	.	.	601
1.50-1.99	.	.	32	103	.	.	1	.	.	.	135
2.00-2.49	.	.	.	33	.	.	.	.	.	.	34
2.50-2.99	.	.	.	2	2	.	1	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	669	2334	1313	211	38	16	2	0	0	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4293.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	761	951	118	55	17	3	.	.	.	.	1905
0.50-0.99	.	777	1127	21	16	8	1	.	.	.	1950
1.00-1.49	.	.	1134	2	7	.	.	.	1	.	1144
1.50-1.99	.	.	85	329	.	.	1	1	.	.	416
2.00-2.49	.	.	.	105	.	.	.	.	.	.	105
2.50-2.99	.	.	.	2	4	.	.	.	.	.	6
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	761	1728	2464	512	42	18	2	1	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 5178.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	761	946	134	62	16	5	1	.	.	.	1925
0.50-0.99	.	905	1348	14	18	13	1	.	.	.	2299
1.00-1.49	.	.	1104	54	2	2	1	1	.	.	1164
1.50-1.99	.	.	98	359	7	1	.	.	1	.	460
2.00-2.49	.	.	.	161	.	.	.	.	.	.	168
2.50-2.99	.	.	.	3	32	.	.	.	.	.	35
3.00-3.49	11	.	.	.	1	.	12
3.50-3.99	0
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	761	1851	2684	653	87	23	4	1	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 5682.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1266	1119	174	73	24	8	1				2665
0.50-0.99		1788	1317	24	23	17		1	1		3171
1.00-1.49			1055	3	3	9					1070
1.50-1.99			275	173		1	1		1		451
2.00-2.49			1	101					1		103
2.50-2.99				17	2				1		20
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49						1				1	2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1266	2907	2822	392	52	36	2	1	4	1	7006

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7006.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1249	1559	147	67	21	5					3048
0.50-0.99		1793	1909	41	29	23	3	1			3799
1.00-1.49			1803	1	2	5	1				1812
1.50-1.99			396	639			1				1036
2.00-2.49				347							347
2.50-2.99				41	20						61
3.00-3.49					10			1			11
3.50-3.99										1	1
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1249	3352	4255	1136	82	33	5	2	0	2	9468

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 9468.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1071	1553	218	97	24	5					2968
0.50-0.99		1243	2353	84	53	42	2	1			3778
1.00-1.49			2707	13	10	13	1	3	1		2778
1.50-1.99			150	115		2		5	3		1315
2.00-2.49				578		1	1		1		581
2.50-2.99				39	50				1		90
3.00-3.49					13				1		14
3.50-3.99					1	1				1	3
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1071	2796	5428	1956	151	64	4	9	7	1	10754

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 10754.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

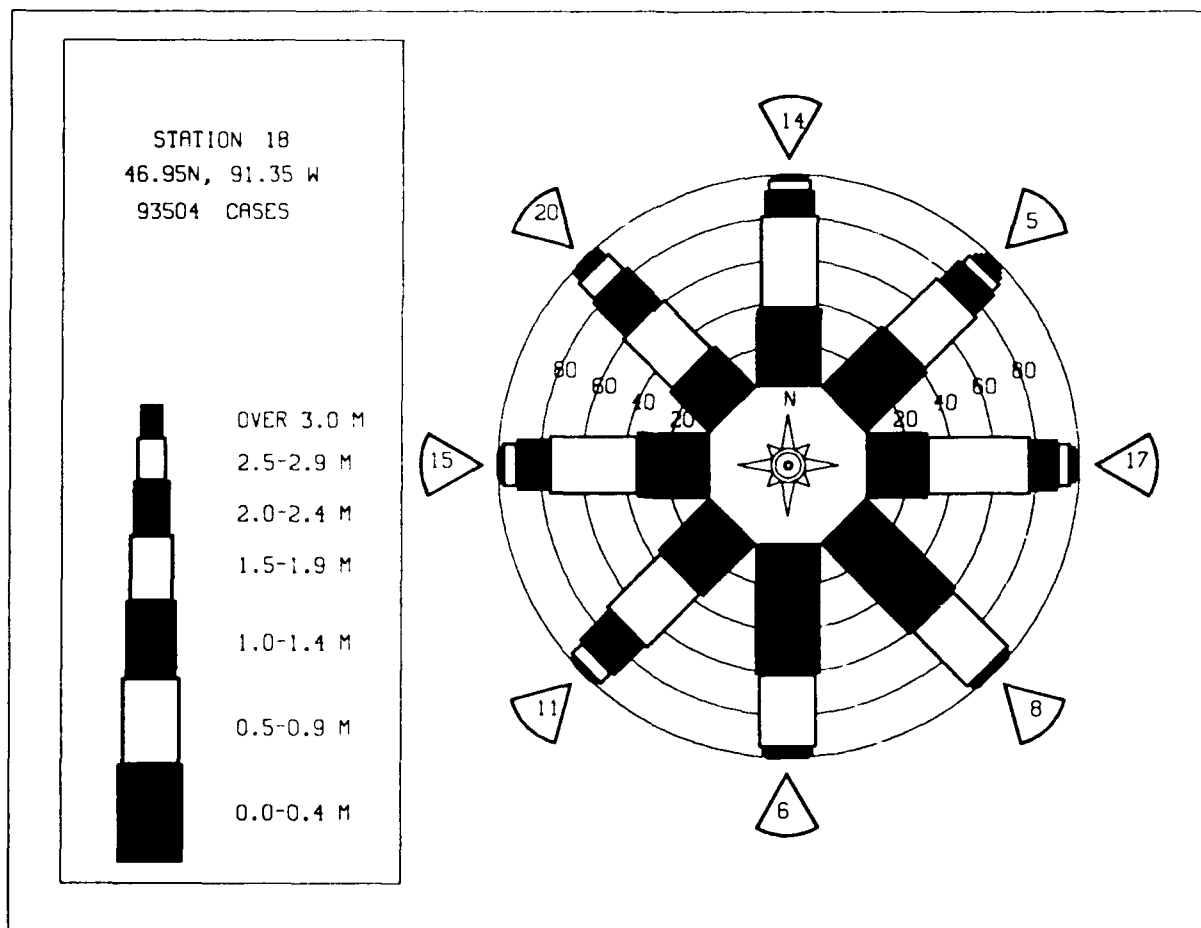
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	935	942	214	93	38	10					2232
0.50-0.99		1059	1273	102	85	52	7	1			2579
1.00-1.49			1373	9	24	31	5	3			1445
1.50-1.99			289	392	1	8	3	6	3		702
2.00-2.49			1	166		5	3	3	4		182
2.50-2.99				17	13		2	2	2	2	38
3.00-3.49					1			1	1	2	5
3.50-3.99										2	2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	935	2001	3150	779	162	106	20	16	10	6	6733

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 6733.

STATION S18 46.95N 91.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1484	1636	371	114	34	9	.	.	.	.	3648
0.50-0.99	.	2028	1678	140	70	37	3	.	.	.	3956
1.00-1.49	.	.	1318	37	33	32	5	1	.	.	1426
1.50-1.99	.	.	218	365	14	20	7	4	1	.	629
2.00-2.49	.	.	.	182	7	21	9	3	2	.	224
2.50-2.99	.	.	.	17	17	5	8	3	1	.	51
3.00-3.49	5	4	3	4	1	.	17
3.50-3.99	2	1	4	.	.	8
4.00-4.49	1	.	1	.	2
4.50-4.99	0
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1484	3664	3585	855	180	130	37	19	8	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S18 (46.95N 91.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	0.8	1.0	0.9	0.8	0.6	0.5	0.5	0.6	0.9	1.2	1.1	0.8
1957	1.0	0.9	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.7	1.1	1.0	0.8
1958	0.7	1.0	0.6	0.9	0.6	0.5	0.5	0.5	0.7	0.8	1.2	1.1	0.8
1959	1.0	0.9	0.8	0.7	0.7	0.5	0.4	0.4	0.7	0.8	1.0	1.1	0.8
1960	0.9	0.9	0.8	1.0	0.6	0.5	0.4	0.5	0.6	0.8	1.2	1.0	0.8
1961	1.0	0.8	1.0	0.7	0.7	0.5	0.4	0.4	0.5	0.6	0.7	0.7	0.7
1962	1.1	0.9	0.9	0.7	0.5	0.4	0.4	0.5	0.6	0.7	0.9	1.1	0.7
1963	1.0	1.0	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.7	0.9	1.1	0.7
1964	1.1	0.9	0.9	0.7	0.7	0.5	0.4	0.6	0.6	0.6	0.9	0.7	0.7
1965	1.0	1.0	0.7	0.6	0.6	0.5	0.4	0.4	0.6	0.8	1.1	1.2	0.7
1966	1.1	1.0	1.4	0.9	0.7	0.5	0.5	0.5	0.6	0.9	0.9	0.9	0.9
1967	1.2	0.9	0.8	0.7	0.7	0.5	0.4	0.5	0.5	0.9	0.8	0.0	0.0
1968	0.8	1.1	0.9	0.8	0.6	0.5	0.5	0.5	0.7	0.7	0.9	1.1	0.9
1969	1.0	0.7	0.8	0.7	0.6	0.6	0.4	0.5	0.5	0.8	0.0	0.8	0.8
1970	0.9	1.1	0.8	0.9	0.9	0.5	0.5	0.5	0.7	0.7	0.8	0.8	0.8
1971	1.1	1.2	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.7	0.9	0.8	0.8
1972	1.1	0.8	1.0	0.7	0.5	0.5	0.4	0.4	0.5	0.8	0.7	0.7	0.7
1973	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.6	0.8	0.8	0.8
1974	0.8	0.7	0.9	0.7	0.6	0.5	0.5	0.5	0.5	0.7	1.1	1.1	0.8
1975	1.1	0.9	1.2	0.9	0.8	0.5	0.5	0.5	0.6	0.8	1.0	0.8	0.8
1976	1.0	0.9	1.2	0.7	0.6	0.4	0.4	0.3	0.3	0.7	0.7	0.7	0.7
1977	0.8	1.1	1.2	0.6	0.6	0.4	0.4	0.4	0.6	0.8	0.9	0.0	0.0
1978	1.0	0.6	0.5	0.7	0.5	0.5	0.4	0.5	0.5	0.7	0.8	0.8	0.6
1979	0.7	0.6	0.9	0.6	0.5	0.5	0.3	0.4	0.6	0.8	0.8	0.8	0.7
1980	0.9	0.7	0.8	0.6	0.5	0.6	0.4	0.5	0.6	0.9	0.0	0.9	0.6
1981	0.8	0.8	0.8	0.7	0.5	0.5	0.4	0.4	0.6	0.8	0.7	0.0	0.6
1982	1.1	0.8	1.1	0.7	0.6	0.4	0.4	0.3	0.6	0.7	0.8	1.1	0.7
1983	0.9	0.8	1.1	0.7	0.7	0.5	0.5	0.4	0.6	0.8	0.8	0.0	0.7
1984	0.9	0.8	0.9	0.8	0.6	0.5	0.5	0.5	0.6	0.9	0.8	0.0	0.8
1985	1.1	0.8	1.3	0.7	0.6	0.4	0.4	0.4	0.6	0.8	1.0	0.0	0.9
1986	1.0	0.7	0.9	0.8	0.6	0.5	0.4	0.4	0.6	0.8	0.8	0.0	0.8
1987	0.7	0.8	1.1	0.6	0.6	0.4	0.4	0.3	0.4	0.8	0.8	0.8	0.6
MEAN	0.9	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S18 (46.95N 91.35W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.5	2.4	4.1	4.1	2.5	2.1	1.0	1.5	1.8	2.6	4.1	2.8	
1957	2.8	2.4	4.4	4.3	2.7	1.7	2.2	1.3	1.9	2.9	2.9	3.3	
1958	2.7	3.5	1.9	4.2	2.0	1.7	1.5	1.5	2.5	2.6	3.3	2.6	
1959	2.9	3.3	2.6	2.0	2.8	1.9	1.5	1.5	2.5	2.8	3.1	7.3	
1960	2.5	3.3	3.6	3.5	2.1	1.7	1.4	1.8	2.0	2.7	7.7	2.5	
1961	3.1	3.8	2.8	2.1	3.1	1.7	2.0	1.1	1.6	2.2	2.6	2.1	
1962	2.2	2.9	4.2	2.3	1.7	1.9	1.2	1.3	2.1	2.7	2.5	2.9	
1963	2.2	2.9	3.0	2.2	2.7	2.0	1.2	1.2	1.7	2.0	2.9	3.9	
1964	3.9	2.6	2.2	2.8	2.5	2.0	1.1	2.2	2.4	2.5	2.8	2.3	
1965	3.1	3.2	4.3	1.9	1.7	1.5	1.1	1.2	2.1	2.5	4.3	4.0	
1966	2.6	2.7	5.5	3.8	2.0	2.0	1.2	1.4	1.8	2.2	2.9	2.5	
1967	5.8	2.9	2.5	2.1	3.2	2.2	1.8	1.3	2.0	3.3	3.2	7.7	
1968	2.6	3.0	2.9	3.0	2.1	1.4	2.8	2.0	1.6	2.6	3.7	3.9	
1969	3.0	2.1	2.5	3.5	2.0	1.6	1.4	2.4	1.6	2.4	2.2	2.5	
1970	2.2	2.6	3.8	2.4	2.5	1.8	1.3	1.5	2.2	2.5	2.7	3.0	
1971	2.4	4.2	3.1	2.2	2.2	1.6	1.4	1.1	1.2	2.8	2.5	2.4	
1972	3.4	3.0	3.4	2.5	2.2	1.4	1.1	1.2	1.9	2.3	3.7	3.4	
1973	2.5	1.7	2.0	1.5	1.9	1.0	1.1	0.8	1.8	2.2	2.1	2.5	
1974	2.6	1.9	2.9	2.5	1.8	1.8	1.8	1.3	1.9	2.0	3.6	2.7	
1975	4.3	3.4	5.4	2.6	1.6	1.3	1.4	2.3	1.9	2.2	3.9	2.2	
1976	2.5	2.6	4.1	3.2	1.8	2.7	1.0	1.1	1.6	1.9	1.9	2.2	
1977	2.2	6.5	5.8	1.7	1.8	1.3	1.4	1.2	3.1	2.9	3.2	4.1	
1978	2.6	1.7	2.2	1.8	1.1	1.6	1.1	1.4	2.9	2.1	2.2	2.2	
1979	2.0	2.3	2.2	2.3	1.6	1.5	1.3	1.6	2.0	2.9	2.3	2.2	
1980	2.3	2.3	3.2	1.8	1.9	1.9	1.1	1.6	2.4	2.2	2.1	2.2	
1981	2.1	2.5	2.4	2.0	1.9	1.9	1.1	1.2	2.4	2.3	2.2	1.9	
1982	4.0	2.2	3.1	2.4	1.5	2.1	1.1	1.1	1.9	2.2	3.1	2.7	
1983	2.3	3.1	3.7	1.9	2.1	1.6	1.3	1.4	1.8	2.1	4.3	2.7	
1984	2.4	2.1	3.0	2.8	2.1	2.2	1.5	1.6	2.0	3.3	2.6	2.3	
1985	2.8	3.2	8.9	2.4	1.6	2.2	1.3	2.1	2.3	1.1	3.1	2.2	
1986	3.5	3.2	3.2	2.7	2.1	1.3	1.9	1.1	2.0	2.2	2.0	2.6	
1987	1.9	3.5	3.4	2.3	2.3	1.5	1.2	1.2	1.7	2.2	2.2	3.0	

32 YR. STATISTICS FOR WIS STATION S18

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	8.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	61.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1676	2111	398	115	48	12	7	.	.	.	4360
0.50-0.99	.	921	2553	149	90	28	10	7	.	.	3778
1.00-1.49	.	.	1172	63	36	28	7	7	.	.	1318
1.50-1.99	.	.	49	406	8	11	6	5	.	.	486
2.00-2.49	.	.	.	269	50	7	1	6	3	1	342
2.50-2.99	.	.	.	10	95	1	1	2	2	2	111
3.00-3.49	17	7	1	2	2	3	34
3.50-3.99	6	1	1	2	.	10
4.00-4.49	1	.	.	.	.	0
4.50-4.99	0
5.00-5.49	1	.	.	0
5.50-5.99	1	2
6.00-6.49	1	0
6.50-6.99	1
7.00+	0
TOTAL	1676	3032	4172	1014	344	131	32	22	12	8	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 9783.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	420	553	177	57	14	3	.	.	.	.	1224
0.50-0.99	.	352	401	95	37	24	1	.	.	.	910
1.00-1.49	.	.	139	56	29	22	5	1	1	.	253
1.50-1.99	.	.	13	60	12	11	5	2	3	.	106
2.00-2.49	.	.	.	22	11	8	12	5	1	1	60
2.50-2.99	.	.	.	3	16	8	3	1	.	.	31
3.00-3.49	1	11	2	3	.	.	17
3.50-3.99	7	2	2	1	1	13
4.00-4.49	1	2	2	1	2	8
4.50-4.99	2	2	1	.	5
5.00-5.49	1	3	.	3
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	1	.	1
TOTAL	420	905	730	293	120	95	34	18	13	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 2480.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	425	506	197	44	16	4	.	.	.	.	1192
0.50-0.99	.	278	377	75	13	13	1	.	1	.	758
1.00-1.49	.	.	150	75	20	21	3	1	.	.	270
1.50-1.99	.	.	8	58	18	10	5	1	1	.	101
2.00-2.49	.	.	1	18	10	9	7	1	1	.	47
2.50-2.99	.	.	.	2	14	3	3	3	3	.	28
3.00-3.49	6	2	2	.	.	10
3.50-3.99	4	4	.	.	.	8
4.00-4.49	1	2	1	.	1	5
4.50-4.99	1	.	1	2
5.00-5.49	2	2	.	4
5.50-5.99	1	2	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	425	784	733	272	91	71	27	13	10	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2288.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	515	685	325	71	8	1	.	.	.	.	1605
0.50-0.99	.	978	472	281	54	20	1	.	.	.	1806
1.00-1.49	.	.	210	156	116	58	19	2	.	.	551
1.50-1.99	.	.	31	58	62	48	19	1	.	.	219
2.00-2.49	.	.	3	11	10	39	21	16	4	.	94
2.50-2.99	.	.	.	1	17	10	13	22	4	.	67
3.00-3.49	5	12	2	9	4	.	32
3.50-3.99	3	5	1	.	1	12
4.00-4.49	7
4.50-4.99	2	.	.	3
5.00-5.49	1	.	.	3
5.50-5.99	1	0
6.00-6.49	2	.	0
6.50-6.99	1	1
7.00+	2
TOTAL	515	1663	1041	578	272	191	72	44	26	5	

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 4139.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1464	2034	817	180	29	7					4531
0.50-0.99		2535	331	495	165	50	3	1	1		3981
1.00-1.49			447	103	132	104	18	4	2	1	831
1.50-1.99			84	6	59	147	38	18	9		351
2.00-2.49			11		1	32	52	32	4		117
2.50-2.99						2	10	10	7		48
3.00-3.49								18	1	1	18
3.50-3.99								10			20
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49										1	1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1464	4969	1690	784	406	342	121	73	27	4	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 9254.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1492	1756	597	152	24	4					4025
0.50-0.99		1902	216	124	93	52	4				2391
1.00-1.49			167	4	31	33	13	2	2		252
1.50-1.99					3	12	3	1	3		36
2.00-2.49			14				2				2
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1492	3658	994	280	151	101	22	3	5	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 6280.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1137	1087	329	96	24	3		1			2677
0.50-0.99		1120	171	36	31	16		1			1375
1.00-1.49			75			10	5	1		1	92
1.50-1.99			3			1	3				7
2.00-2.49							1				1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1137	2207	578	132	55	30	9	3	0	1	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3889.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	849	942	158	65	12	2					2028
0.50-0.99		816	80	18	18	13					943
1.00-1.49			51			4					53
1.50-1.99			2			1					3
2.00-2.49				1							1
2.50-2.99							1				1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	849	1758	291	84	30	20	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 2840.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	863	1014	148	66	16	5	.	.	1	.	2113
0.50-0.99	.	934	57	18	13	4	.	.	.	.	1026
1.00-1.49	.	.	132	.	1	1	2	.	.	.	136
1.50-1.99
2.00-2.49
2.50-2.99	.	.	1	1	.	.	1	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	863	1948	338	85	30	10	3	0	2	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 3072.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	714	1064	84	52	13	3	.	.	.	.	1930
0.50-0.99	.	1143	121	18	14	7	1	.	.	.	1304
1.00-1.49	.	.	191	.	.	4	.	.	1	.	196
1.50-1.99	.	.	23	.	.	1	.	.	.	.	24
2.00-2.49	.	.	.	2	.	.	.	.	.	.	0
2.50-2.99	0
3.00-3.49	1	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	714	2207	419	72	27	15	1	0	1	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3239.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	747	1163	133	50	17	2	.	.	.	.	2112
0.50-0.99	.	1179	1068	16	9	11	.	.	.	.	2283
1.00-1.49	.	.	363	100	1	4	1	1	1	.	471
1.50-1.99	.	.	90	94	.	.	.	1	.	.	185
2.00-2.49	.	.	.	8	.	.	.	.	.	.	8
2.50-2.99	2	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	747	2342	1654	268	29	17	1	2	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 4740.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	790	1248	121	45	13	3	1	.	.	.	2221
0.50-0.99	.	966	1603	10	9	13	1	.	.	.	2602
1.00-1.49	.	.	1150	189	1	2	.	1	1	.	1344
1.50-1.99	.	.	53	456	3	1	.	.	.	.	513
2.00-2.49	.	.	.	109	16	.	.	.	.	.	125
2.50-2.99	.	.	.	2	43	.	.	.	.	.	47
3.00-3.49	4	.	.	.	.	.	11
3.50-3.99	2	.	.	.	.	3
4.00-4.49	1	0
4.50-4.99	1	1	.	.	.	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	790	2214	2927	811	91	29	3	1	1	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6433.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1142	1765	159	60	11	5			1		3143
0.50-0.99		1072	1675	14	20	14	1	1			2797
1.00-1.49			1394	34	1	3					1433
1.50-1.99			88	478	2		1		1		579
2.00-2.49				233	1			1	1		236
2.50-2.99				17	58						75
3.00-3.49					18	1					19
3.50-3.99						2					2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1142	2837	3326	836	111	26	2	2	3	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 7757.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1049	2077	105	43	14	4					3292
0.50-0.99		1159	2635	19	16	17		1			3847
1.00-1.49			2569	16		3	2				2610
1.50-1.99			124	1202	1						1326
2.00-2.49				671							672
2.50-2.99				16	117			1			134
3.00-3.49					28	2				1	31
3.50-3.99					2	1					3
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1049	3236	5433	1987	178	27	2	2	0	1	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 11150.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	938	1627	162	66	18	4					2815
0.50-0.99		1136	2282	56	40	37	2				3553
1.00-1.49			2294	9	7	9		4			2323
1.50-1.99			133	1024	1			1	1		1160
2.00-2.49				536	3						539
2.50-2.99				31	43				1	1	76
3.00-3.49					10						10
3.50-3.99					1	1					2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	938	2763	4871	1722	122	52	2	5	2	1	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 9809.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

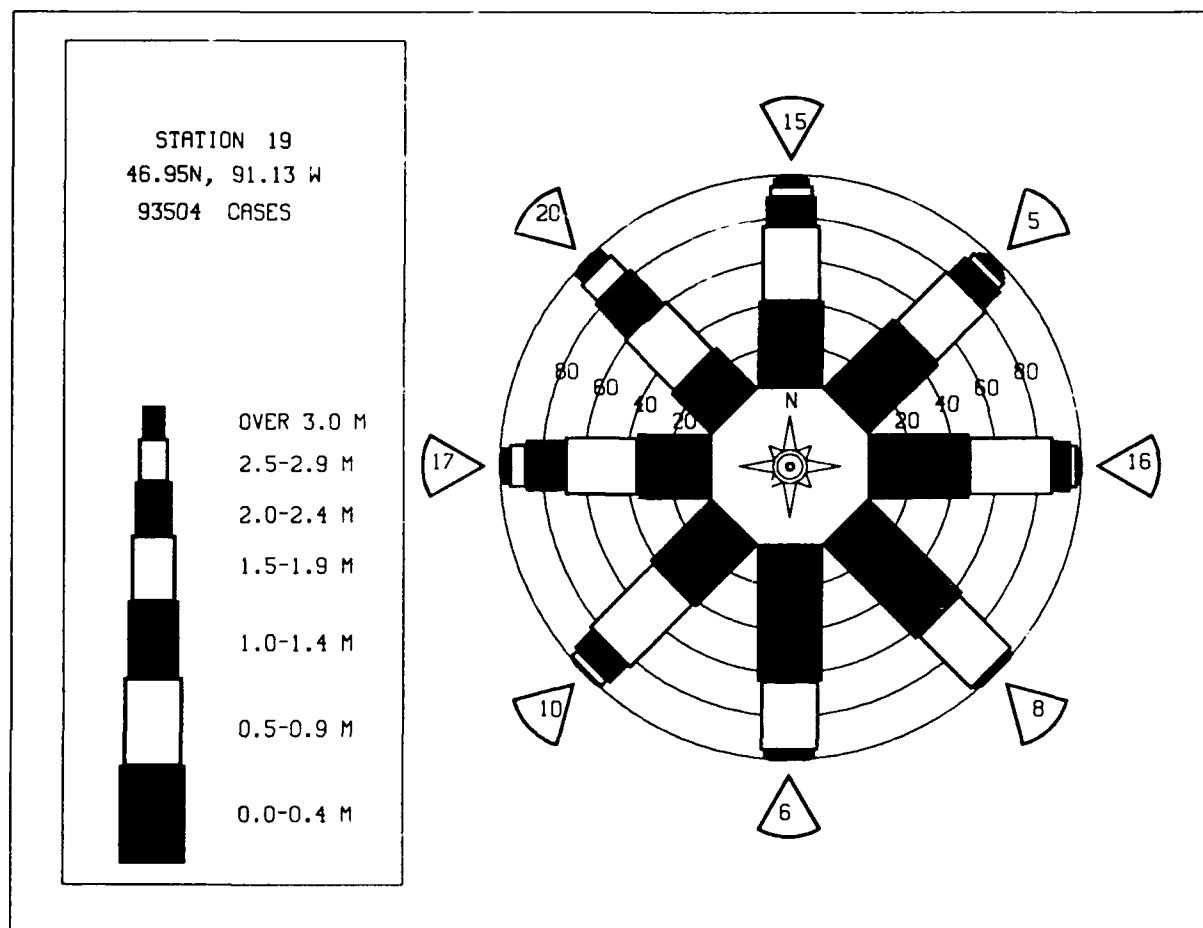
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	842	1230	173	67	40	9					2361
0.50-0.99		687	1449	63	64	38	4				2305
1.00-1.49			1134	50	12	8					1206
1.50-1.99			84	496	13	1	2	3	3		589
2.00-2.49				244	13		1		2		260
2.50-2.99				10	40				1		51
3.00-3.49					6					1	7
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	842	1917	2840	930	175	56	9	3	6	1	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6351.

STATION S19 46.95N 91.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1507	2087	409	123	32	7					4165
0.50-0.99		1758	1549	149	69	39	2				3566
1.00-1.49			1164	88	41	32	7				1334
1.50-1.99			81	434	17	24	8				568
2.00-2.49			1	213	11	9	10		2		248
2.50-2.99				9	45	2	3		1		61
3.00-3.49					9	2			1		16
3.50-3.99						2					2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1507	3845	3204	1016	224	119	30	14	5	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S19 (46.95N 91.13W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.8	0.9	0.9	0.8	0.5	0.4	0.5	0.6	0.9	1.2	1.1	0.8
1957	1.1	0.9	0.8	0.8	0.7	0.5	0.4	0.5	0.6	0.6	1.1	1.1	0.7
1958	0.7	1.1	0.6	0.8	0.6	0.5	0.5	0.5	0.7	0.8	1.2	1.0	0.7
1959	1.0	0.9	0.8	0.7	0.7	0.5	0.4	0.4	0.7	0.8	1.1	1.0	0.7
1960	0.9	0.9	0.8	1.0	0.6	0.5	0.4	0.4	0.6	0.7	1.2	1.0	0.7
1961	1.0	0.8	0.9	0.7	0.6	0.5	0.4	0.3	0.5	0.6	0.7	0.7	0.6
1962	1.1	0.9	0.8	0.7	0.5	0.4	0.4	0.4	0.6	0.7	0.8	1.1	0.7
1963	1.0	1.0	0.9	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.9	1.1	0.7
1964	1.1	0.9	0.9	0.7	0.7	0.4	0.3	0.5	0.5	0.7	0.9	0.7	0.7
1965	1.0	1.0	0.9	0.6	0.5	0.4	0.4	0.3	0.6	0.8	1.0	1.2	0.7
1966	1.1	0.9	1.4	0.8	0.7	0.6	0.5	0.5	0.6	0.9	0.9	0.9	0.8
1967	1.2	0.9	0.8	0.7	0.7	0.4	0.4	0.4	0.5	0.9	1.0	1.0	0.8
1968	0.8	1.1	0.9	0.8	0.6	0.6	0.5	0.5	0.5	0.7	0.9	1.0	0.7
1969	1.0	0.7	0.8	0.6	0.6	0.6	0.4	0.6	0.5	0.8	0.9	0.8	0.6
1970	0.9	1.1	0.8	0.9	0.8	0.5	0.5	0.5	0.7	0.7	0.8	0.9	0.8
1971	1.1	1.1	0.9	0.8	0.6	0.4	0.4	0.3	0.6	0.6	0.9	0.8	0.7
1972	1.1	0.8	0.9	0.6	0.4	0.4	0.3	0.4	0.5	0.6	0.6	0.7	0.6
1973	0.7	0.7	0.9	0.6	0.5	0.4	0.4	0.3	0.5	0.6	0.8	0.8	0.6
1974	0.8	0.6	0.9	0.6	0.5	0.5	0.5	0.5	0.5	0.7	1.1	0.9	0.7
1975	1.0	0.9	1.1	0.7	0.7	0.5	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1976	1.0	0.9	1.1	0.7	0.6	0.6	0.4	0.3	0.4	0.5	0.8	0.8	0.7
1977	0.8	0.9	1.1	0.6	0.5	0.4	0.3	0.3	0.5	0.7	1.1	0.8	0.6
1978	1.0	0.9	0.9	0.6	0.4	0.4	0.4	0.5	0.7	0.7	0.8	0.9	0.6
1979	0.7	0.6	0.9	0.6	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1980	0.9	0.7	0.8	0.5	0.5	0.6	0.4	0.4	0.6	0.9	0.9	0.7	0.6
1981	0.8	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.6	0.7	0.7	0.7	0.6
1982	1.1	0.9	1.1	0.7	0.5	0.4	0.3	0.3	0.6	0.7	0.8	0.9	0.7
1983	0.9	0.9	1.0	0.6	0.6	0.5	0.4	0.4	0.6	0.8	1.1	1.0	0.7
1984	0.9	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.8	0.8	0.8	0.7
1985	1.1	0.9	0.9	0.7	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1986	1.0	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1987	0.7	0.8	0.9	0.6	0.5	0.4	0.4	0.3	0.4	0.6	0.8	0.8	0.6
MEAN	0.9	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S19 (46.95N 91.13W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.6	2.5	3.2	2.9	2.3	2.1	1.2	1.2	2.1	2.9	4.5	3.1	
1957	2.6	2.5	4.2	4.2	2.6	1.9	2.3	1.5	2.1	2.9	3.1	3.3	
1958	2.3	2.8	3.3	3.4	2.3	1.8	1.7	1.7	2.6	3.0	4.0	2.9	
1959	2.9	2.8	3.0	3.4	3.1	2.3	1.7	1.6	2.1	3.0	3.3	4.1	
1960	2.5	3.1	3.6	3.2	2.4	2.0	1.4	1.4	2.0	3.0	3.7	2.7	
1961	3.1	2.1	2.5	2.6	2.9	1.5	2.2	1.1	1.8	2.2	3.0	2.2	
1962	2.9	2.2	4.1	2.5	1.8	1.4	1.2	1.6	2.0	3.0	3.8	2.9	
1963	2.5	2.8	3.0	2.2	1.8	1.5	1.3	1.2	1.6	1.9	2.9	3.9	
1964	3.5	2.8	2.5	3.0	2.5	2.1	1.1	1.7	2.4	3.1	2.6	2.2	
1965	3.5	2.8	2.7	3.2	1.7	1.8	1.2	1.1	2.0	2.9	3.9	4.1	
1966	3.0	2.7	5.1	3.1	2.2	1.8	1.2	1.2	2.1	3.1	2.4	2.5	
1967	3.2	2.7	2.9	3.4	3.2	1.7	1.7	1.6	2.0	3.3	2.4	2.9	
1968	3.2	3.1	2.9	2.8	2.1	1.3	2.5	2.0	1.7	2.5	3.8	3.7	
1969	3.3	2.7	2.7	2.5	1.7	1.7	1.5	2.8	1.6	2.8	2.3	2.6	
1970	3.4	2.6	3.6	2.9	2.1	2.0	1.5	1.5	2.1	2.8	2.7	2.8	
1971	3.2	3.5	3.1	2.8	2.1	1.4	1.6	1.1	1.2	2.9	2.8	2.5	
1972	3.2	2.5	3.2	2.7	1.8	1.5	1.3	1.1	1.7	2.6	3.6	3.3	
1973	3.2	2.2	1.9	1.6	1.8	1.0	1.2	0.9	1.5	2.5	2.0	2.8	
1974	4.0	2.1	2.9	2.4	1.8	1.4	2.1	1.5	1.9	2.0	3.9	3.3	
1975	2.8	3.3	3.3	2.1	1.3	1.3	1.6	2.1	2.0	2.3	4.0	2.6	
1976	2.5	3.0	4.3	2.1	2.0	2.6	1.1	1.1	1.8	1.9	2.1	2.3	
1977	2.5	5.9	5.6	2.0	2.0	1.5	1.6	1.2	2.7	2.5	3.0	3.1	
1978	2.7	2.1	2.3	2.1	1.2	1.4	1.1	1.2	2.3	2.0	2.2	2.1	
1979	1.7	2.4	2.9	2.0	1.3	1.4	1.4	1.6	1.8	2.2	2.2	2.4	
1980	2.8	2.1	3.7	1.7	1.4	1.7	1.1	1.4	2.2	2.4	2.1	2.9	
1981	2.2	2.4	2.1	1.9	1.9	2.3	0.9	0.9	2.8	2.3	2.2	2.2	
1982	3.7	2.1	3.5	2.5	1.2	2.4	1.3	1.1	1.7	2.4	2.8	3.5	
1983	2.5	3.1	2.9	2.4	1.5	1.3	1.3	1.5	2.1	2.1	3.7	3.0	
1984	2.4	2.3	3.0	3.2	2.3	2.3	1.7	1.6	1.8	2.9	2.6	2.5	
1985	2.8	3.7	7.9	2.6	1.7	2.4	1.1	2.3	2.3	2.4	2.4	3.2	
1986	3.4	2.2	3.7	2.6	2.4	1.3	1.4	1.2	1.8	2.2	4.8	3.0	
1987	2.5	2.8	2.6	2.2	1.9	1.5	1.3	1.4	1.7	2.5	2.4	2.8	

32 YR. STATISTICS FOR WIS STATION S19

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	59.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	961	1384	331	54	19	6	3	.	.	.	2755
0.50-0.99	.	702	1558	213	83	41	3	.	.	.	2600
1.00-1.49	.	.	809	98	84	32	14	1	.	.	1038
1.50-1.99	.	.	71	173	37	37	5	6	.	.	329
2.00-2.49	.	.	1	154	9	22	5	8	.	.	199
2.50-2.99	.	.	.	10	9	9	13	6	.	.	51
3.00-3.49	3	.	5	.	4	3	15
3.50-3.99	1	3	1	2	7
4.00-4.49	1	3	1	5
4.50-4.99	1	1	1
5.00-5.49	1	.	1
5.50-5.99	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	961	2086	2770	702	244	147	46	25	13	7	6564

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6564.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	436	739	148	31	11	2	.	.	.	.	1367
0.50-0.99	.	339	780	130	31	6	.	.	.	.	1286
1.00-1.49	.	.	176	143	41	25	2	1	.	.	388
1.50-1.99	.	.	4	77	53	36	3	2	.	.	175
2.00-2.49	.	.	.	37	23	24	2	9	.	.	93
2.50-2.99	.	.	.	2	22	18	12	12	1	.	67
3.00-3.49	5	17	7	2	3	.	34
3.50-3.99	11	.	3	3	1	38
4.00-4.49	2	4	4	1	.	11
4.50-4.99	1	.	2	1	4
5.00-5.49	0
5.50-5.99	1	1
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	436	1078	1108	420	186	141	31	33	11	3	3238

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 3238.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	340	495	146	19	10	2	.	.	.	.	1012
0.50-0.99	.	212	664	193	19	7	.	.	.	.	995
1.00-1.49	.	.	134	191	36	14	1	.	.	.	376
1.50-1.99	.	.	8	75	50	25	1	.	.	.	159
2.00-2.49	.	.	.	9	21	17	3	2	.	.	52
2.50-2.99	19	11	8	1	1	.	40
3.00-3.49	1	13	8	5	.	.	27
3.50-3.99	5	2	4	.	.	11
4.00-4.49	5	8	.	.	13
4.50-4.99	8	3	.	5
5.00-5.49	1	2	.	.	3
5.50-5.99	2	2	2	4
6.00-6.49	3	1	3
6.50-6.99	1	1	2
7.00+	1
TOTAL	340	707	952	387	156	94	29	24	10	6	2545

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 2545.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	377	596	161	18	3	.	.	.	.	.	1155
0.50-0.99	.	408	1197	110	22	12	.	.	.	.	1749
1.00-1.49	.	.	393	383	35	19	1	.	.	.	831
1.50-1.99	.	.	21	259	109	24	2	.	.	.	415
2.00-2.49	.	.	.	58	71	29	5	.	.	.	161
2.50-2.99	.	.	.	2	88	24	8	1	.	.	123
3.00-3.49	7	48	12	3	.	.	70
3.50-3.99	42	19	1	5	.	67
4.00-4.49	2	31	3	4	.	40
4.50-4.99	17	9	2	1	29
5.00-5.49	14	3	1	18
5.50-5.99	1	5	.	6
6.00-6.49	2	6	.	8
6.50-6.99	1	1	2
7.00+	1	4	5
TOTAL	377	1004	1772	830	335	200	93	34	27	6	4394

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 4394.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	851	1487	351	53	17	1	.	.	.	.	2760
0.50-0.99	.	959	2825	182	20	13	.	.	.	.	3999
1.00-1.49	.	.	948	844	54	13	.	.	.	.	1858
1.50-1.99	.	.	40	525	165	21	2	3	.	.	756
2.00-2.49	.	.	.	148	89	65	7	3	.	.	307
2.50-2.99	.	.	.	3	143	68	7	3	2	.	226
3.00-3.49	12	133	19	3	4	.	168
3.50-3.99	58	32	3	2	.	95
4.00-4.49	6	38	1	.	.	45
4.50-4.99	13	18	1	.	32
5.00-5.49	25	.	.	25
5.50-5.99	6	3	.	9
6.00-6.49	1	.	.	4
6.50-6.99	0
7.00+	0
TOTAL	851	2446	4164	1755	500	378	114	62	15	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 9637.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	960	1438	345	58	10	.	.	1	.	.	2812
0.50-0.99	.	925	1379	101	18	7	.	1	.	.	2430
1.00-1.49	.	.	268	219	32	16	.	1	.	.	536
1.50-1.99	.	.	8	103	27	16	1	2	.	.	157
2.00-2.49	.	.	.	18	11	12	3	1	.	.	45
2.50-2.99	12	2	1	2	.	.	17
3.00-3.49	2	.	.	1	.	5
3.50-3.99	3	2	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	960	2363	2000	499	110	58	7	7	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 5626.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	885	1275	372	60	13	1	.	1	.	.	2607
0.50-0.99	.	756	611	91	19	4	.	.	.	.	1481
1.00-1.49	.	.	105	133	12	7	.	.	.	.	257
1.50-1.99	.	.	8	24	6	6	1	.	.	.	45
2.00-2.49	.	.	1	.	6	2	.	.	.	.	9
2.50-2.99	1	4	1	.	.	.	6
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	885	2031	1097	308	57	24	2	1	0	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4131.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	680	930	222	27	6	1	.	.	.	.	1866
0.50-0.99	.	537	267	84	13	2	.	.	.	.	903
1.00-1.49	.	.	72	58	8	1	.	.	.	.	139
1.50-1.99	.	.	2	5	3	3	.	.	.	.	13
2.00-2.49	1	.	1	.	2
2.50-2.99	1	.	.	.	.	1
3.00-3.49	1	.	1
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	680	1467	563	174	30	9	2	0	2	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2745.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	629	904	260	52	7	3	1	.	.	.	1856
0.50-0.99	.	566	242	58	12	1	.	.	i	.	880
1.00-1.49	.	.	71	33	8	2	.	.	.	.	114
1.50-1.99	.	.	5	2	4	.	.	.	.	.	11
2.00-2.49	.	.	1	.	.	i	.	.	.	.	2
2.50-2.99	1	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	i	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	629	1470	579	145	31	8	1	0	1	1	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2688.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	543	1120	225	34	5	.	.	.	.	.	1927
0.50-0.99	.	888	376	48	7	2	.	.	.	.	1321
1.00-1.49	.	.	176	23	10	3	1	.	.	.	213
1.50-1.99	.	.	13	13	2	3	.	1	1	.	33
2.00-2.49	.	.	1	5	.	.	.	.	.	.	6
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	543	2008	791	124	25	8	1	1	1	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 3283.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	653	1202	270	45	13	2	.	.	.	.	2185
0.50-0.99	.	675	1549	66	13	4	.	.	.	.	2307
1.00-1.49	.	.	778	176	6	7	.	.	.	.	967
1.50-1.99	.	.	90	295	6	5	.	1	.	.	397
2.00-2.49	.	.	.	119	14	.	.	.	.	.	133
2.50-2.99	.	.	.	6	1	.	.	.	.	.	7
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	653	1877	2687	707	54	18	0	1	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5619.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	746	1330	199	33	11	.	.	.	.	.	2319
0.50-0.99	.	565	1932	52	14	4	i	.	.	.	2568
1.00-1.49	.	.	950	327	28	8	i	i	.	.	1294
1.50-1.99	.	.	41	481	7	1	i	.	.	.	551
2.00-2.49	.	.	.	168	27	2	.	i	i	.	249
2.50-2.99	.	.	.	5	62	5	.	.	.	.	72
3.00-3.49	8	24	.	.	.	.	32
3.50-3.99	10	.	.	i	.	11
4.00-4.49	2	.	.	.	.	2
4.50-4.99	i	.	.	.	1
5.00-5.49	1	i	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	746	1895	3122	1066	207	56	4	3	2	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 6653.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1071	2087	218	59	12	3	.	.	.	.	3450
0.50-0.99	.	860	2487	55	26	20	1	1	.	.	3450
1.00-1.49	.	.	1269	189	11	4	1	.	.	.	1474
1.50-1.99	.	.	59	776	6	4	.	.	.	.	845
2.00-2.49	.	.	1	442	62	1	1	.	.	.	507
2.50-2.99	.	.	.	5	154	.	.	1	.	.	160
3.00-3.49	35	22	.	.	.	.	57
3.50-3.99	7	.	.	.	.	7
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1071	2947	4034	1526	306	62	4	2	0	0	
MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 9318.											

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	993	2125	141	49	12	3	.	.	.	.	3323
0.50-0.99	.	1033	2302	68	22	23	.	1	.	.	3449
1.00-1.49	.	.	1410	97	14	4	1	.	.	.	1526
1.50-1.99	.	.	110	713	4	3	.	.	.	.	830
2.00-2.49	.	.	.	404	54	1	1	.	.	.	460
2.50-2.99	.	.	.	11	129	.	.	.	.	.	140
3.00-3.49	27	4	.	.	.	.	31
3.50-3.99	1	5	.	.	2	.	8
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	993	3158	3963	1342	263	43	2	1	2	0	
MEAN HS(M) = 0.8	LARGEST HS(M)= 3.8		MEAN TP(SEC)= 3.8		NO. OF CASES= 9143.						

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	927	1678	242	65	27	6	.	.	.	.	2945
0.50-0.99	.	1105	2451	141	64	47	2	.	.	.	3810
1.00-1.49	.	.	2462	18	20	12	.	.	.	.	2512
1.50-1.99	.	.	167	1085	3	7	1	2	.	.	1265
2.00-2.49	.	.	.	542	.	1	1	1	.	.	545
2.50-2.99	.	.	.	24	33	1	.	.	.	.	58
3.00-3.49	10	.	.	.	.	.	10
3.50-3.99	0
4.00-4.49	0
4.50-4.99	2	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	927	2783	5322	1875	157	73	5	3	0	2	
MEAN HS(M) = 0.9	LARGEST HS(M)= 4.6		MEAN TP(SEC)= 4.0		NO. OF CASES= 10433.						

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

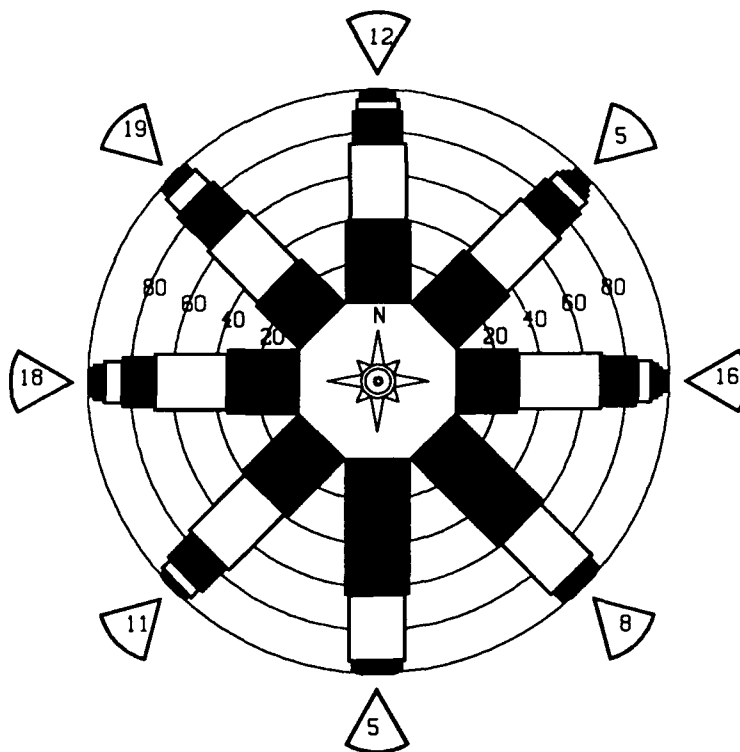
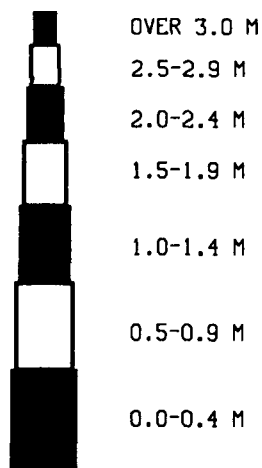
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	917	1404	254	71	33	5	.	.	.	.	2684
0.50-0.99	.	690	1699	121	64	52	1	.	.	.	2627
1.00-1.49	.	.	1404	56	52	25	5	.	.	.	1543
1.50-1.99	.	.	97	594	18	14	2	1	1	.	730
2.00-2.49	.	.	.	318	5	8	1	7	.	.	340
2.50-2.99	.	.	.	20	27	1	1	4	3	.	56
3.00-3.49	5	.	1	2	1	.	9
3.50-3.99	1	.	.	1
4.00-4.49	1	1	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	917	2094	3454	1180	204	105	11	19	7	1	
MEAN HS(M) = 0.8	LARGEST HS(M)=		4.3	MEAN TP(SEC)=		3.9	NO. OF CASES=		7487.		

STATION S20 47.08N 90.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1197	2020	389	73	21	3	.	.	.	.	3703
0.50-0.99	.	1122	2232	162	45	25	.	.	.	.	3586
1.00-1.49	.	.	1143	299	43	19	2	.	.	.	1506
1.50-1.99	.	.	75	520	52	21	2	2	.	.	672
2.00-2.49	.	.	.	242	44	18	2	3	.	.	309
2.50-2.99	.	.	.	9	70	14	5	3	1	.	102
3.00-3.49	11	26	5	1	1	.	44
3.50-3.99	14	5	1	1	.	21
4.00-4.49	1	3	1	.	.	10
4.50-4.99	2	.	.	5
5.00-5.49	4	.	.	4
5.50-5.99	1	.	1
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	1197	3142	3839	1305	286	141	32	17	5	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 20
47.08N, 90.92 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S20 (47.08N 90.92W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	0.9	1.1	1.0	0.8	0.6	0.5	0.5	0.6	1.0	1.3	1.2	0.9
1957	1.1	1.0	0.8	0.8	0.9	0.6	0.5	0.5	0.7	0.7	1.1	1.1	0.9
1958	0.8	1.1	0.6	1.0	0.7	0.5	0.5	0.5	0.7	0.8	1.3	1.0	0.8
1959	1.0	0.9	0.8	0.8	0.8	0.5	0.5	0.4	0.7	0.9	1.1	1.2	0.8
1960	0.9	0.9	0.9	1.0	0.7	0.5	0.4	0.5	0.6	0.8	1.2	1.0	0.8
1961	0.9	0.9	1.1	0.8	0.7	0.6	0.4	0.3	0.5	0.6	0.7	0.8	0.7
1962	1.2	1.0	0.9	0.8	0.6	0.5	0.4	0.5	0.6	0.8	0.9	1.1	0.8
1963	1.0	1.1	1.0	0.7	0.6	0.5	0.4	0.4	0.5	0.7	1.0	1.1	0.7
1964	1.2	1.0	1.0	0.9	0.8	0.5	0.4	0.6	0.6	0.7	1.0	0.8	0.8
1965	1.1	1.1	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.9	1.2	1.3	0.8
1966	1.1	1.1	1.7	1.0	0.8	0.6	0.5	0.6	0.6	1.0	1.0	1.0	0.9
1967	1.3	1.0	1.0	0.8	0.8	0.6	0.5	0.5	0.6	1.1	0.9	1.2	0.9
1968	1.0	1.3	1.1	1.0	0.7	0.7	0.6	0.6	0.6	0.7	1.1	1.2	0.9
1969	1.1	0.8	0.9	0.8	0.7	0.6	0.4	0.6	0.5	0.8	0.9	0.8	0.7
1970	0.9	1.2	0.9	1.1	1.0	0.6	0.5	0.5	0.8	0.7	0.9	1.0	0.8
1971	1.1	1.3	1.0	0.9	0.7	0.5	0.4	0.4	0.4	0.8	1.0	0.8	0.8
1972	1.2	0.9	1.1	0.8	0.5	0.5	0.4	0.4	0.6	0.9	0.7	0.8	0.7
1973	0.9	0.7	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	1.0	0.9	0.7
1974	0.9	0.7	1.0	0.7	0.7	0.5	0.5	0.5	0.5	0.7	1.1	1.0	0.7
1975	1.1	0.9	1.3	0.9	0.5	0.5	0.5	0.5	0.6	0.8	1.1	0.8	0.8
1976	1.1	1.0	1.4	0.8	0.7	0.7	0.4	0.3	0.4	0.5	0.8	0.8	0.7
1977	0.9	1.2	1.4	0.6	0.6	0.4	0.4	0.4	0.7	0.8	0.9	1.1	0.8
1978	1.0	0.7	0.6	0.8	0.5	0.4	0.4	0.5	0.9	0.7	0.9	1.0	0.7
1979	0.8	0.7	1.0	0.7	0.5	0.5	0.3	0.4	0.6	0.7	0.9	0.8	0.7
1980	0.9	0.7	0.8	0.6	0.6	0.6	0.4	0.5	0.7	1.0	0.7	1.0	0.7
1981	0.8	0.9	0.9	0.7	0.5	0.5	0.3	0.4	0.7	0.8	0.7	0.7	0.7
1982	1.2	0.9	1.2	0.8	0.7	0.4	0.3	0.3	0.6	0.8	0.9	1.0	0.8
1983	0.9	0.9	1.3	0.7	0.7	0.5	0.5	0.4	0.6	0.7	1.3	1.1	0.8
1984	0.9	0.9	1.0	0.9	0.6	0.5	0.4	0.4	0.6	1.0	0.9	1.1	0.8
1985	1.1	0.9	1.4	0.8	0.6	0.6	0.4	0.5	0.6	0.7	0.9	1.1	0.8
1986	1.1	0.7	1.0	1.0	0.6	0.5	0.4	0.4	0.7	0.7	1.1	0.9	0.8
1987	0.8	0.9	1.3	0.6	0.6	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.7
MEAN	1.0	0.9	1.0	0.8	0.7	0.5	0.4	0.5	0.6	0.8	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S20 (47.08N 90.92W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	3.8	6.3	3.8	3.6	2.7	1.2	1.8	2.3	3.1	4.8	4.9	
1957	2.8	2.4	3.8	4.4	3.3	2.1	1.1	1.4	2.3	3.1	4.8	4.9	
1958	2.0	2.4	3.4	4.4	3.3	2.1	1.1	1.4	2.3	3.1	4.8	4.9	
1959	2.9	3.0	3.3	3.7	2.6	2.2	1.7	1.7	2.5	3.4	4.4	4.5	
1960	2.7	4.1	3.9	3.0	2.7	2.3	1.3	2.4	2.0	3.2	3.6	3.6	
1961	2.7	2.4	2.5	2.9	2.6	2.1	1.8	2.4	2.0	3.3	3.3	3.3	
1962	2.2	3.3	3.3	2.4	1.9	2.2	1.3	1.6	2.0	3.3	3.3	3.3	
1963	2.8	3.3	3.6	2.5	2.2	2.6	1.4	1.6	2.0	3.3	3.3	3.3	
1964	4.2	3.2	3.4	2.8	2.2	2.1	1.2	3.1	3.0	3.3	3.3	3.6	
1965	3.5	4.4	3.3	2.3	2.2	2.0	1.2	1.2	3.1	3.3	3.3	3.3	
1966	3.4	3.3	3.9	3.5	2.6	2.1	1.2	1.2	3.3	3.3	3.5	3.8	
1967	3.5	3.7	3.3	3.5	2.4	2.1	1.1	1.7	3.3	3.3	3.5	3.5	
1968	3.6	3.1	3.3	3.5	2.2	2.1	1.1	1.2	3.3	3.3	3.5	3.8	
1969	3.0	2.6	3.3	3.5	2.2	2.0	1.4	3.1	3.3	3.3	3.6	3.6	
1970	2.2	3.1	4.2	3.5	3.4	2.5	1.8	1.6	3.3	3.3	4.1	4.1	
1971	2.2	3.1	4.2	3.5	3.4	2.5	1.8	1.6	3.3	3.3	4.1	4.1	
1972	3.4	4.4	3.8	3.0	3.0	2.4	1.4	1.4	3.3	3.3	3.4	3.4	
1973	3.3	3.2	3.3	3.8	2.4	2.4	1.3	1.7	3.3	3.3	3.3	3.3	
1974	3.2	3.2	3.1	3.5	2.6	2.2	1.7	2.2	3.3	3.3	3.3	3.3	
1975	4.8	3.5	3.5	3.5	2.6	2.2	1.3	1.7	3.3	3.3	3.3	3.3	
1976	3.2	3.4	3.5	3.0	2.0	2.3	1.1	1.2	3.3	3.3	3.3	3.3	
1977	3.3	3.8	3.5	3.5	1.8	1.9	1.3	1.8	3.3	3.3	3.4	3.4	
1978	2.8	2.1	3.6	3.4	1.8	1.6	1.3	1.7	3.3	3.3	2.7	2.7	
1979	2.0	3.6	3.3	3.7	2.1	2.1	1.5	1.4	3.3	3.3	2.8	2.8	
1980	3.4	3.6	3.3	3.3	2.5	2.4	1.0	1.6	3.3	3.3	2.1	2.1	
1981	2.4	2.4	3.5	2.8	1.9	2.2	1.0	1.2	3.3	3.3	2.4	2.4	
1982	4.9	3.2	4.2	3.3	1.7	2.6	1.4	1.2	3.3	3.3	3.5	3.5	
1983	3.0	3.9	4.9	2.6	2.2	2.5	1.4	1.8	3.3	3.3	2.1	2.1	
1984	2.6	3.1	3.6	3.4	2.4	2.6	1.8	1.6	3.3	3.3	2.8	2.8	
1985	4.1	3.1	3.4	2.9	1.8	2.6	1.1	2.2	3.3	3.3	3.9	3.9	
1986	3.8	3.2	3.6	4.1	2.6	1.3	2.0	1.2	3.3	3.3	3.3	3.3	
1987	2.4	4.8	4.7	2.2	3.2	1.6	1.4	1.3	3.3	3.3	2.6	2.6	

32 YR. STATISTICS FOR WIS STATION S20

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	8.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	65.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85030421

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	401	861	211	35	5						1513
0.50-0.99		318	1150	177	63	19					1667
1.00-1.49			350	376	44	39	1				810
1.50-1.99			10	264	55	22	9				360
2.00-2.49				89	65	14	3	4			175
2.50-2.99				4	130	18	4	7	1		154
3.00-3.49					11	23	1	5	2		42
3.50-3.99					1	7	1		1		10
4.00-4.49							1		1	2	4
4.50-4.99										3	3
5.00-5.49									1		1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	401	1179	1721	885	374	132	20	16	6	5	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4448.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	349	652	186	23	1						1211
0.50-0.99		255	761	110	32	7					1165
1.00-1.49			132	231	50	33					446
1.50-1.99			5	106	62	26	4	1			204
2.00-2.49				25	33	42	4	3			107
2.50-2.99					41	10	12	2			65
3.00-3.49					5	29	5	4	2		45
3.50-3.99						13	6	1	4		24
4.00-4.49						3	6	3	1		13
4.50-4.99							3	1	3		7
5.00-5.49								1	2	1	4
5.50-5.99										1	1
6.00-6.49										1	1
6.50-6.99											0
7.00+											0
TOTAL	349	907	1084	495	224	163	40	16	12	3	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3095.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	449	833	221	21	3						1527
0.50-0.99		233	873	128	33						1276
1.00-1.49			172	270	42	12					496
1.50-1.99			2	85	71	33	1	3			193
2.00-2.49				18	44	32	2				96
2.50-2.99					22	18	7	6			53
3.00-3.49					1	25	9	3			38
3.50-3.99						12	3	3			18
4.00-4.49						1	4	3	2	2	12
4.50-4.99							2	4			9
5.00-5.49									3	1	4
5.50-5.99									1	1	2
6.00-6.49										1	1
6.50-6.99									1		1
7.00+											0
TOTAL	449	1066	1268	522	216	142	28	22	10	6	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 3501.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	427	867	170	37	2						1503
0.50-0.99		441	1244	121	18	3					1827
1.00-1.49			305	375	34	13					727
1.50-1.99			6	186	78	22					292
2.00-2.49				51	51	28	6				137
2.50-2.99					51	33	9	2			95
3.00-3.49					7	68	6	1	2		84
3.50-3.99						42	7	5	2		56
4.00-4.49						6	28	2	4		40
4.50-4.99							11	5	4	2	22
5.00-5.49							1	16	4		21
5.50-5.99								3	3	1	7
6.00-6.49									1	1	2
6.50-6.99									2		2
7.00+										1	1
TOTAL	427	1308	1725	770	241	216	68	34	22	5	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4521.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	775	1525	329	41	3	.	.	1	.	.	2674
0.50-0.99	.	920	2591	136	33	5	.	.	.	.	3685
1.00-1.49	.	.	731	759	35	14	1	.	.	.	1540
1.50-1.99	.	.	22	405	120	27	1	2	.	.	577
2.00-2.49	.	.	.	78	90	48	5	2	.	.	223
2.50-2.99	.	.	.	3	110	57	.	4	.	.	174
3.00-3.49	7	124	2	3	2	.	138
3.50-3.99	75	2	.	.	.	77
4.00-4.49	12	34	.	.	.	46
4.50-4.99	14	6	.	.	20
5.00-5.49	6	.	1	7
5.50-5.99	3	1	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	775	2445	3673	1422	398	362	59	27	4	1	8587.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 8587.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	710	1350	234	39	1	2	.	.	.	.	2336
0.50-0.99	.	624	1497	79	17	5	.	.	.	.	2222
1.00-1.49	.	.	394	243	20	17	.	1	.	.	675
1.50-1.99	.	.	8	131	41	18	2	1	.	.	202
2.00-2.49	.	.	.	23	16	6	1	1	.	.	47
2.50-2.99	16	12	.	1	1	.	30
3.00-3.49	1	12	.	.	.	.	13
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	1	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	710	1974	2133	515	112	73	3	5	1	1	5178.

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 5178.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	750	1155	224	32	6	.	.	.	.	.	2167
0.50-0.99	.	450	905	59	13	.	.	.	.	.	1427
1.00-1.49	.	.	188	72	7	6	1	.	.	.	274
1.50-1.99	.	.	3	63	5	4	.	.	.	.	75
2.00-2.49	.	.	.	14	5	2	.	.	.	.	21
2.50-2.99	.	.	.	1	3	1	.	1	1	.	7
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	750	1605	1320	241	39	12	3	1	1	0	3723.

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 3723.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	680	1160	193	28	4	.	.	.	.	.	2065
0.50-0.99	.	422	900	23	6	1	.	.	.	.	1352
1.00-1.49	.	.	212	41	8	1	.	.	.	.	262
1.50-1.99	.	.	7	78	2	2	.	.	1	.	90
2.00-2.49	.	.	.	24	1	.	.	.	.	.	25
2.50-2.99	6	.	.	.	.	.	6
3.00-3.49	1	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	680	1582	1312	194	27	4	0	0	2	0	3562.

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 3562.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	678	1176	193	39	6	1	1	1	.	.	2094
0.50-0.99	.	414	987	36	11	1	.	.	.	.	1449
1.00-1.49	.	.	418	39	6	2	.	.	.	.	465
1.50-1.99	.	.	25	163	2	2	.	.	.	.	192
2.00-2.49	.	.	.	72	9	.	.	.	.	.	81
2.50-2.99	4	.	.	.	.	.	4
3.00-3.49	3	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	678	1590	1623	349	38	8	1	1	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4018.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	526	960	144	31	2	.	.	.	.	.	1663
0.50-0.99	.	568	466	24	7	4	.	.	1	.	1070
1.00-1.49	.	.	216	36	3	2	.	.	.	.	257
1.50-1.99	.	.	23	79	.	.	.	1	.	.	103
2.00-2.49	.	.	.	37	2	.	.	.	.	.	39
2.50-2.99	5	.	.	.	.	.	5
3.00-3.49	1	1	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	526	1528	849	207	20	7	0	1	1	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 2941.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	573	1261	209	39	6	1	.	.	.	.	2089
0.50-0.99	.	946	507	82	18	4	.	.	.	.	1557
1.00-1.49	.	.	198	66	8	5	.	.	.	.	277
1.50-1.99	.	.	69	41	6	1	.	.	.	.	117
2.00-2.49	.	.	1	1	2	.	.	2	.	.	6
2.50-2.99	2	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	573	2207	984	229	40	13	0	2	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 3794.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	698	1582	342	56	9	.	.	.	.	.	2687
0.50-0.99	.	1075	1688	157	13	9	.	.	.	.	2942
1.00-1.49	.	.	467	563	9	2	.	.	.	.	1041
1.50-1.99	.	.	38	257	70	3	.	1	.	.	369
2.00-2.49	.	.	.	41	42	5	.	.	.	.	88
2.50-2.99	.	.	.	3	25	9	.	.	.	.	37
3.00-3.49	1	10	.	.	.	.	11
3.50-3.99	4	.	1	1	.	7
4.00-4.49	4	1	.	.	5
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	698	2657	2535	1077	169	42	5	3	1	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 6734.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) -270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1156	2612	333	79	12	.	.	.	.	.	4192
0.50-0.99	.	1002	3019	64	40	10	.	.	.	.	4135
1.00-1.49	.	.	993	771	13	7	1	.	.	.	1785
1.50-1.99	.	.	71	759	102	3	.	1	.	.	936
2.00-2.49	.	.	.	279	172	6	.	.	1	.	458
2.50-2.99	.	.	.	8	283	21	.	.	.	.	312
3.00-3.49	23	102	.	.	.	.	125
3.50-3.99	48	1	.	.	.	49
4.00-4.49	2	2	.	.	.	4
4.50-4.99	3	.	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1156	3614	4416	1960	645	199	7	1	1	0	
MEAN HS(M) = 0.8	LARGEST HS(M) = 4.9		MEAN TP(SEC) = 4.0		NO. OF CASES = 11231.						

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1052	2748	306	55	12						4173
0.50-0.99		994	3123	83	35	21	1	.	.	.	4257
1.00-1.49	.	.	1198	560	11	6	1	.	.	.	1776
1.50-1.99	.	.	60	999	42	5	.	.	.	.	1106
2.00-2.49	.	.	.	447	238	1	.	.	.	.	686
2.50-2.99	.	.	.	2	410	9	.	1	.	.	422
3.00-3.49	.	.	.	.	37	106	.	.	.	.	143
3.50-3.99	.	.	.	.	1	33	1	.	.	.	35
4.00-4.49	.	.	.	.	.	6	2	.	.	.	8
4.50-4.99	.	.	.	.	.	.	2	.	.	.	2
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1052	3742	4687	2146	786	187	7	1	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) = 4.9		MEAN TP(SEC) = 4.1		NO. OF CASES = 11804.						

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	760	1788	305	74	21	3	.	.	.	.	2951
0.50-0.99	.	802	3071	115	56	35	.	.	.	.	4079
1.00-1.49	.	.	1367	402	12	21	.	1	.	.	1803
1.50-1.99	.	.	44	1029	5	1	1	.	.	.	1080
2.00-2.49	.	.	.	591	183	2	.	.	.	.	776
2.50-2.99	.	.	.	1	346	.	.	.	.	.	347
3.00-3.49	37	12	.	.	.	.	49
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	.	.	.	.	1
4.50-4.99	1	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	760	2590	4787	2212	660	78	1	1	0	1	
MEAN HS(M) = 0.9	LARGEST HS(M)=		4.5	MEAN TP(SEC)=		4.2	NO. OF CASES=		10382.		

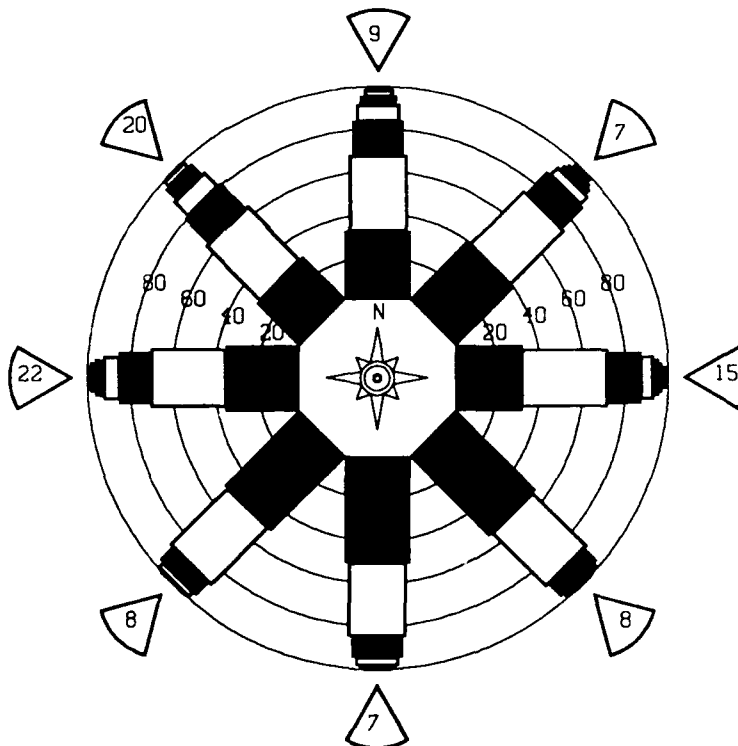
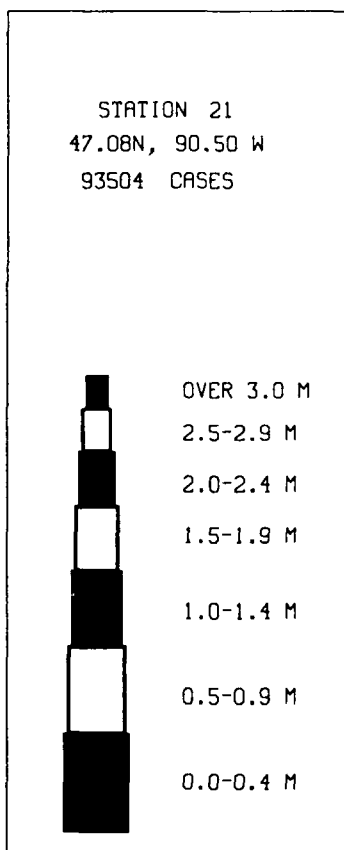
STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	474	967	221	41	17	.	.	.	.	.	1720
0.50-0.99	.	460	1753	83	51	20	.	.	.	.	2367
1.00-1.49	.	.	752	288	37	35	2	.	.	.	1114
1.50-1.99	.	.	28	512	18	11	2	.	.	.	571
2.00-2.49	.	.	.	248	112	3	.	.	.	.	363
2.50-2.99	.	.	.	4	206	1	.	1	.	.	212
3.00-3.49	22	14	.	.	1	.	37
3.50-3.99	2	.	.	.	.	2
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	474	1427	2754	1176	463	87	4	1	1	0	
MEAN HS (M) = 0.9	LARGEST HS (M) =		4.1	MEAN TP (SEC) =		4.2	NO. OF CASES =		5985.		

STATION S21 47.08N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1046	2150	382	67	11						3656
0.50-0.99		993	2454	142	45	15					3649
1.00-1.49			810	509	34	22					1375
1.50-1.99			42	516	68	18		1			647
2.00-2.49				204	107	18		2			333
2.50-2.99					15	53		1			191
3.00-3.49						24		1			27
3.50-3.99						3					1
4.00-4.49								1			1
4.50-4.99											0
5.00-5.49								2			0
5.50-5.99									1		0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1046	3143	3688	1440	446	172	22	9	3	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S21 (47.08N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	1.0	1.1	1.0	0.8	0.6	0.5	0.5	0.7	1.1	1.4	1.2	0.9
1957	1.2	1.1	0.0	0.8	0.9	0.6	0.5	0.5	0.7	0.7	1.1	1.1	0.8
1958	0.8	1.2	0.0	0.8	0.9	0.7	0.5	0.5	0.8	0.9	1.1	1.1	0.8
1959	1.0	0.9	0.0	0.8	0.8	0.5	0.4	0.4	0.7	0.9	1.1	1.1	0.8
1960	1.0	1.0	0.9	1.0	0.7	0.5	0.4	0.4	0.6	0.8	1.1	1.1	0.8
1961	0.9	0.9	1.1	0.8	0.7	0.5	0.4	0.4	0.6	0.7	0.8	0.9	0.7
1962	1.3	0.9	1.1	0.8	0.6	0.4	0.4	0.4	0.5	0.8	0.9	1.1	0.8
1963	1.1	1.1	1.0	0.7	0.6	0.4	0.4	0.4	0.5	0.7	1.1	1.1	0.8
1964	1.2	1.1	1.0	0.9	0.9	0.5	0.4	0.4	0.7	0.8	1.1	1.1	0.8
1965	1.2	1.2	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.9	1.1	1.1	0.8
1966	1.3	1.2	1.1	1.0	0.9	0.6	0.5	0.5	0.7	1.1	1.1	1.1	0.8
1967	1.4	1.1	1.1	0.9	0.8	0.6	0.6	0.6	0.7	1.1	1.1	1.1	0.8
1968	1.0	1.1	1.2	1.0	0.7	0.6	0.6	0.6	0.7	0.9	1.1	1.1	0.8
1969	1.3	0.8	1.0	0.8	0.7	0.6	0.4	0.6	0.6	0.9	0.9	0.8	0.8
1970	0.9	1.1	1.0	0.8	0.9	0.6	0.5	0.5	0.8	0.7	1.1	0.8	0.8
1971	1.2	1.1	1.0	0.9	0.7	0.5	0.4	0.4	0.5	0.8	1.1	0.8	0.8
1972	1.3	0.9	1.1	0.7	0.5	0.5	0.4	0.4	0.6	0.9	0.7	0.8	0.8
1973	0.9	0.9	0.9	0.8	0.7	0.5	0.4	0.3	0.6	0.8	1.1	0.8	0.7
1974	0.9	0.9	1.0	0.7	0.7	0.5	0.5	0.5	0.6	0.7	1.1	1.1	0.8
1975	1.1	0.9	1.3	0.7	0.5	0.5	0.5	0.5	0.6	0.9	1.1	0.8	0.8
1976	1.1	1.1	1.4	0.7	0.7	0.5	0.4	0.4	0.5	0.9	0.9	0.8	0.8
1977	1.0	1.1	1.2	0.6	0.6	0.4	0.4	0.4	0.6	0.8	0.9	1.1	0.8
1978	1.0	0.7	1.0	0.8	0.8	0.5	0.4	0.4	0.7	0.7	0.9	0.8	0.7
1979	0.8	0.7	1.1	0.8	0.8	0.5	0.3	0.4	0.7	0.7	0.9	0.8	0.7
1980	1.0	0.8	0.8	0.6	0.6	0.5	0.3	0.5	0.7	1.0	0.9	1.1	0.7
1981	0.9	0.8	0.9	0.7	0.7	0.5	0.3	0.4	0.7	0.8	0.8	0.8	0.7
1982	1.3	0.8	1.1	0.8	0.8	0.5	0.3	0.4	0.8	0.8	0.9	1.1	0.8
1983	1.0	0.8	1.1	0.7	0.6	0.5	0.4	0.4	0.6	0.7	1.1	1.1	0.8
1984	0.9	0.8	1.1	0.9	0.8	0.5	0.4	0.4	0.6	0.9	1.1	1.1	0.8
1985	1.2	0.9	1.4	0.8	0.8	0.6	0.4	0.4	0.6	0.8	0.9	1.0	0.8
1986	1.1	0.8	1.1	1.0	0.8	0.5	0.4	0.4	0.7	0.7	0.9	0.8	0.8
1987	0.8	0.9	1.2	0.6	0.5	0.4	0.4	0.4	0.4	0.8	0.9	0.8	0.7
MEAN	1.1	1.0	1.1	0.8	0.7	0.5	0.4	0.5	0.6	0.8	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S21 (47.08N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.3	3.9	6.0	3.6	3.1	2.1	1.2	1.6	2.3	3.6	4.6	4.6	
1957	3.1	2.7	3.2	4.2	2.8	1.9	2.2	2.0	2.6	2.3	4.1	3.9	
1958	3.7	3.9	2.0	4.9	3.1	2.1	2.0	1.6	2.8	3.3	3.9	3.9	
1959	3.3	3.9	3.4	3.1	3.2	2.7	1.7	2.1	2.0	3.2	3.6	3.5	
1960	3.1	3.2	3.2	3.2	3.2	2.1	1.9	2.0	2.5	3.3	3.0	3.0	
1961	3.1	2.8	2.7	2.2	2.0	1.6	2.7	1.5	2.2	2.3	3.8	2.9	
1962	3.6	3.0	4.1	3.7	2.7	1.5	2.0	1.4	2.2	4.0	3.1	4.4	
1963	3.3	3.4	3.1	3.9	2.2	2.2	1.5	1.5	2.3	2.4	3.0	2.2	
1964	4.1	3.6	3.4	3.2	3.2	1.7	1.1	2.6	2.5	3.6	3.5	3.3	
1965	3.5	4.1	3.7	3.3	2.1	1.9	1.3	1.4	2.4	3.1	5.7	4.6	
1966	4.1	3.5	3.5	3.4	3.3	1.7	1.1	2.2	2.8	4.6	4.0	3.5	
1967	6.9	3.4	3.8	3.0	3.5	2.5	2.8	1.9	2.3	3.9	3.0	3.5	
1968	3.1	4.1	4.2	3.9	2.5	2.0	2.5	2.3	2.5	2.9	4.8	3.3	
1969	3.9	3.4	4.1	3.4	1.8	1.9	1.3	3.6	3.9	3.1	2.7	3.3	
1970	3.8	3.1	3.7	3.3	2.9	1.7	1.6	1.7	3.6	3.1	3.7	3.3	
1971	3.9	4.4	4.8	3.7	2.7	1.4	1.5	1.4	4.4	3.5	3.8	2.9	
1972	3.0	3.8	3.7	2.9	2.5	1.9	1.6	1.1	2.5	3.3	3.5	3.5	
1973	3.2	2.2	3.5	3.4	2.6	1.3	1.8	0.9	3.3	2.8	3.1	4.0	
1974	3.2	2.8	3.2	2.4	2.2	1.5	2.4	1.5	1.4	2.5	3.3	3.5	
1975	4.6	4.2	5.5	2.2	1.3	1.4	1.8	2.1	2.0	3.0	4.8	2.6	
1976	2.9	3.6	5.5	5.5	1.9	1.7	1.1	1.7	2.5	2.0	2.9	4.4	
1977	3.4	5.3	5.2	2.1	1.6	1.4	2.4	1.6	3.5	3.2	3.6	5.1	
1978	3.0	2.3	3.1	2.4	1.8	1.2	1.2	1.5	3.4	2.6	2.9	3.0	
1979	2.4	3.8	3.1	3.6	2.5	1.4	1.5	1.5	2.0	2.7	2.4	2.6	
1980	4.2	3.6	3.2	1.9	2.0	1.7	0.9	1.6	2.6	3.3	2.5	2.8	
1981	2.5	2.3	3.3	3.0	1.3	2.8	1.1	1.1	3.8	2.8	2.9	2.4	
1982	4.4	2.7	4.9	3.5	1.8	2.8	1.3	1.2	1.9	3.2	3.2	2.2	
1983	3.0	4.2	4.2	2.7	1.5	1.7	1.4	1.6	2.0	2.5	4.2	3.5	
1984	3.3	2.8	3.5	3.1	2.5	2.5	2.0	1.6	1.7	3.9	3.5	3.1	
1985	3.7	3.5	7.1	3.3	1.8	3.2	1.2	2.4	3.0	2.8	3.2	3.9	
1986	4.3	3.3	3.6	3.7	2.5	1.4	1.6	1.2	2.9	2.7	4.2	2.2	
1987	2.5	4.2	4.4	2.1	2.8	1.5	1.5	1.5	1.5	3.0	2.9	2.8	

32 YR. STATISTICS FOR WIS STATION S21

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	71.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	505	1057	290	51	71	19	.	.	.	.	1910
0.50-0.99	.	343	1232	140	7	19	.	.	.	.	1805
1.00-1.49	.	.	352	462	74	62	2	.	.	.	952
1.50-1.99	.	.	10	243	122	36	11	.	.	.	422
2.00-2.49	.	.	.	72	77	23	4	4	.	.	180
2.50-2.99	.	.	.	5	145	16	3	6	1	.	176
3.00-3.49	8	18	1	5	1	.	93
3.50-3.99	11	1	.	2	.	14
4.00-4.49	4	1	.	2	.	3
4.50-4.99	1	2	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	505	1400	1884	973	504	249	23	15	7	4	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 5218.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	456	737	247	23	3	.	.	.	.	.	1466
0.50-0.99	.	276	747	127	47	8	.	.	.	.	1205
1.00-1.49	.	.	136	228	47	31	1	.	.	.	443
1.50-1.99	.	.	5	95	70	33	3	1	.	.	207
2.00-2.49	.	.	.	23	27	43	2	2	.	.	97
2.50-2.99	.	.	.	1	39	19	11	7	1	.	78
3.00-3.49	2	38	5	3	.	.	48
3.50-3.99	16	9	3	3	1	32
4.00-4.49	2	5	3	3	1	14
4.50-4.99	1	1	3	1	6
5.00-5.49	1	2	1	4
5.50-5.99	1	1
6.00-6.49	1	1
6.50-6.99	1	1
7.00+	1	0
TOTAL	456	1013	1135	497	235	190	37	21	12	7	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 3385.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	499	850	288	33	3	1	.	.	.	.	1674
0.50-0.99	.	236	811	158	32	10	.	.	.	.	1247
1.00-1.49	.	.	160	260	43	22	.	1	.	.	486
1.50-1.99	.	.	1	83	73	31	3	3	.	.	194
2.00-2.49	.	.	.	13	28	33	5	3	.	.	82
2.50-2.99	20	20	9	6	.	.	55
3.00-3.49	2	27	4	3	.	.	36
3.50-3.99	10	5	1	.	1	17
4.00-4.49	2	3	3	.	2	10
4.50-4.99	1	4	6	1	12
5.00-5.49	2	1	.	3
5.50-5.99	2	.	2
6.00-6.49	1	.	1
6.50-6.99	1	1	2
7.00+	0
TOTAL	499	1086	1260	547	201	156	30	26	11	5	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 3589.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	449	888	225	37	1	1	.	.	.	.	1601
0.50-0.99	.	454	1228	145	27	5	.	.	.	.	1859
1.00-1.49	.	.	364	379	45	26	.	.	.	.	814
1.50-1.99	.	.	8	226	56	27	.	.	.	.	321
2.00-2.49	.	.	.	80	35	23	.	2	1	.	168
2.50-2.99	9	23	.	.	.	.	116
3.00-3.49	8	67	.	3	2	.	82
3.50-3.99	41	.	2	.	.	51
4.00-4.49	6	.	1	.	1	23
4.50-4.99	1	12	1	.	.	18
5.00-5.49	6	1	.	1	14
5.50-5.99	1	10	.	.	4
6.00-6.49	1	.	1	4
6.50-6.99	1	.	1
7.00+	0
TOTAL	449	1342	1825	867	282	224	36	24	23	4	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4767.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	819	1552	405	50	5	1	.	.	.	.	2832
0.50-0.99	.	938	2518	182	44	6	.	.	.	.	3688
1.00-1.49	.	.	756	624	47	20	3	.	.	.	1450
1.50-1.99	.	.	25	454	65	24	4	1	1	.	574
2.00-2.49	.	.	.	114	67	36	3	3	1	.	224
2.50-2.99	.	.	.	1	178	12	2	3	2	.	198
3.00-3.49	13	90	1	2	.	.	105
3.50-3.99	62	1	.	.	.	63
4.00-4.49	17	3	.	.	.	20
4.50-4.99	7	.	.	.	1	8
5.00-5.49	2	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	819	2490	3704	1425	419	268	23	11	4	1	8584

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 8584.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	860	1366	290	45	4	1	.	1	.	.	2567
0.50-0.99	.	687	1336	85	27	8	.	.	.	.	2143
1.00-1.49	.	.	432	113	28	21	1	1	.	.	596
1.50-1.99	.	.	18	90	17	16	3	2	.	.	146
2.00-2.49	.	.	.	20	5	4	.	1	1	.	31
2.50-2.99	.	.	.	1	13	2	.	.	.	.	16
3.00-3.49	2	.	.	.	1	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	860	2053	2076	354	96	52	4	5	2	0	5157

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 5157.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	931	1211	303	41	3	1	.	.	.	.	2490
0.50-0.99	.	507	777	75	20	3	.	.	.	.	1382
1.00-1.49	.	.	286	21	8	13	.	1	.	.	329
1.50-1.99	.	.	7	36	5	4	1	.	1	.	49
2.00-2.49	.	.	.	5	1	.	.	1	1	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	931	1718	1373	178	32	21	1	2	2	1	3992

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3992.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	810	1196	224	32	8	.	.	1	.	.	2271
0.50-0.99	.	514	777	36	12	2	.	1	.	.	1342
1.00-1.49	.	.	314	6	4	2	1	.	.	.	327
1.50-1.99	.	.	9	65	2	2	.	.	.	.	78
2.00-2.49	.	.	.	9	.	1	.	.	.	.	10
2.50-2.99	.	.	.	1	1	.	.	.	.	.	2
3.00-3.49	1	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	810	1710	1324	149	27	7	1	3	0	0	3777

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3777.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	913	1367	241	40	4		1				2566
0.50-0.99		620	1023	40	13	2					1698
1.00-1.49			652	2	6	2			1		663
1.50-1.99			27	134	1	1	1				164
2.00-2.49				38			1				39
2.50-2.99				1	2						3
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	913	1987	1943	255	27	5	3	0	1	0	
MEAN HS(M) = 0.6	LARGEST HS(M) = 3.0		MEAN TP(SEC) = 3.4		NO. OF CASES = 4809.						

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	683	1304	194	45	3	2	.	.	1	.	2232
0.50-0.99	.	1266	497	45	14	5	.	.	.	.	1827
1.00-1.49	.	.	308	8	2	2	.	.	.	.	320
1.50-1.99	.	.	72	48	.	1	.	1	.	.	122
2.00-2.49	.	.	1	19	.	.	.	.	.	.	20
2.50-2.99	1	.	.	.	.	.	1
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	683	2570	1072	165	21	10	0	1	1	0	
MEAN HS(M) = 0.5	LARGEST HS(M)=		3.0	MEAN TP(SEC)=		3.2	NO. OF CASES=		4237.		

STATION S22 46.95N 90.50W AZIMUTH(DEGREES)=225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	845	1271	266	63	11	3	.	.	.	.	2459
0.50-0.99	.	1352	310	60	23	3	.	1	.	.	1749
1.00-1.49	.	.	239	2	4	8	.	.	.	.	253
1.50-1.99	.	.	50	2	.	3	.	.	.	.	55
2.00-2.49	.	.	.	5	.	.	.	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	845	2623	865	132	38	17	0	1	0	0	
MEAN HS(M) = 0.5	LARGEST HS(M) = 2.4		MEAN TP(SEC) = 3.2		NO. OF CASES = 4235.						

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	964	1170	335	87	20	3					2579
0.50-0.99	.	1095	242	54	31	14	1	.	.	.	1437
1.00-1.49	.	.	154	2	6	7		.	.	.	169
1.50-1.99	.	.	36	6	1	.	1	1	1	.	46
2.00-2.49	.	.	.	8	.	.	.	1	.	.	9
2.50-2.99	1	1	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	964	2265	767	157	58	24	2	3	2	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.8		MEAN TP (SEC) = 3.2		NO. OF CASES = 3974.						

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1544	2098	647	126	21	2	1	1	.	.	4440
0.50-0.99	.	1361	347	127	24	23	1	1	.	.	1914
1.00-1.49	.	1	290	34	27	16	2	.	.	.	370
1.50-1.99	.	.	72	1	5	2	.	1	.	.	81
2.00-2.49	.	.	4	.	.	.	1	.	.	.	5
2.50-2.99	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1544	3460	1360	289	107	43	5	3	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 6376.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1601	2610	915	81	22	3	.	.	.	.	5232
0.50-0.99	.	2499	808	368	90	26	1	.	.	.	3792
1.00-1.49	.	.	588	160	119	16	1	.	.	.	884
1.50-1.99	.	.	185	63	93	41	1	.	.	.	383
2.00-2.49	.	.	11	39	21	20	.	1	.	.	92
2.50-2.99	.	.	.	2	23	7	.	.	.	.	32
3.00-3.49	1	9	.	.	.	.	10
3.50-3.99	1	2	.	.	.	.	3
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1601	5109	2507	713	370	124	5	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 9764.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1119	2066	957	99	24	1	.	.	.	.	4266
0.50-0.99	.	1555	3129	479	71	31	.	.	.	.	5265
1.00-1.49	.	.	1242	1239	157	26	2	1	.	.	2667
1.50-1.99	.	.	156	1134	183	25	.	1	.	.	1499
2.00-2.49	.	.	8	393	303	39	.	.	.	.	743
2.50-2.99	.	.	.	8	502	80	.	.	.	.	590
3.00-3.49	19	163	.	.	1	.	163
3.50-3.99	17	.	.	.	.	17
4.00-4.49	4	.	.	.	1	5
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1119	3621	5492	3352	1259	386	4	2	1	1	

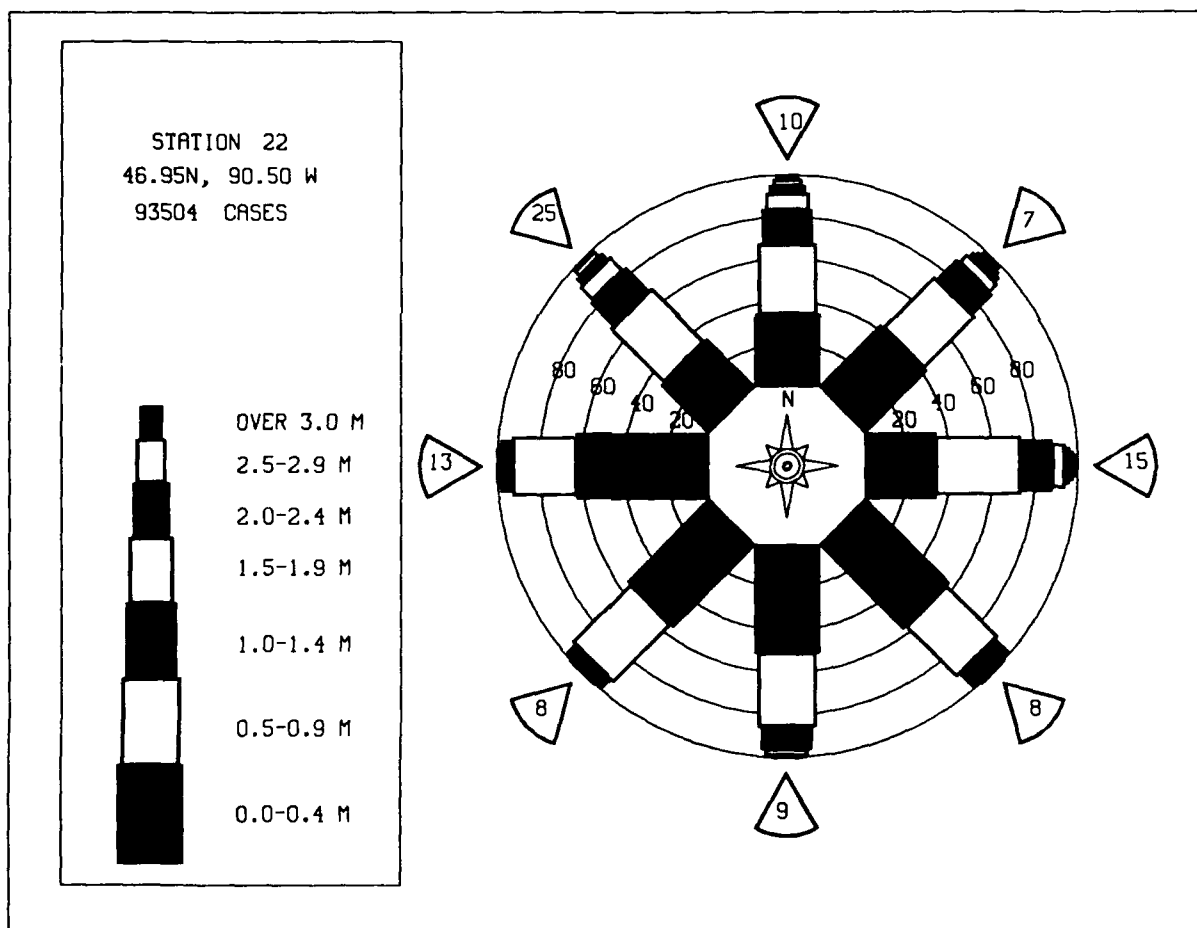
MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 14260.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	666	1131	403	56	22	5	.	.	.	.	2283
0.50-0.99	.	536	1885	120	74	23	.	.	.	.	2638
1.00-1.49	.	.	576	685	55	42	2	.	.	.	1360
1.50-1.99	.	.	37	577	90	12	4	.	.	.	720
2.00-2.49	.	.	.	214	155	5	1	.	.	.	375
2.50-2.99	337	16	.	1	.	.	354
3.00-3.49	23	102	.	.	.	.	125
3.50-3.99	19	.	.	.	1	20
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	666	1667	2901	1652	756	225	8	1	0	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 7380.

STATION S22 46.95N 90.50W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER
0.00-0.49	1367	2188	623	91	16	2	.	.	.	4287
0.50-0.99	.	1424	1767	225	65	19	.	.	.	3500
1.00-1.49	.	.	685	423	68	32	1	.	.	1209
1.50-1.99	.	.	72	326	78	26	3	1	.	506
2.00-2.49	.	.	2	106	74	23	2	1	.	208
2.50-2.99	.	.	.	2	135	19	3	2	.	161
3.00-3.49	8	57	1	1	.	67
3.50-3.99	18	2	.	.	20
4.00-4.49	3	1	.	.	5
4.50-4.99	1	1	1	3
5.00-5.49	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1367	3612	3149	1173	444	199	15	7	1	0
MEAN HS(M)= 0.7 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S22 (46.95N 90.50W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.8	1.0	1.0	0.7	0.5	0.5	0.4	0.6	0.9	1.2	1.0	0.8
1957	1.0	1.2	0.8	0.7	0.8	0.5	0.4	0.5	0.6	0.8	1.1	0.9	0.7
1958	0.7	1.2	0.8	0.8	0.8	0.5	0.4	0.4	0.6	0.8	1.1	0.8	0.7
1959	0.9	0.8	0.8	0.6	0.7	0.4	0.4	0.4	0.6	0.8	1.1	1.1	0.7
1960	0.9	1.0	0.8	0.6	0.7	0.4	0.4	0.4	0.6	0.8	1.1	1.1	0.7
1961	0.8	0.7	1.0	0.7	0.6	0.5	0.3	0.3	0.5	0.6	0.7	0.8	0.6
1962	1.1	0.9	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.8	1.1	0.7
1963	0.9	1.0	0.9	0.6	0.5	0.4	0.4	0.4	0.5	0.6	1.0	1.1	0.7
1964	1.1	0.8	1.0	0.8	0.7	0.4	0.4	0.6	0.5	0.6	0.9	0.7	0.7
1965	1.1	1.0	0.8	0.7	0.5	0.4	0.4	0.4	0.6	0.9	1.1	1.2	0.8
1966	1.2	1.1	1.1	0.7	0.5	0.5	0.4	0.5	0.6	1.0	1.1	1.1	0.9
1967	1.3	1.1	1.0	0.8	0.7	0.5	0.5	0.5	0.6	1.1	1.1	1.1	0.9
1968	1.0	1.1	1.0	0.8	0.7	0.6	0.5	0.5	0.6	1.0	1.2	1.1	0.9
1969	1.2	0.7	0.9	0.8	0.6	0.5	0.4	0.5	0.5	0.8	0.9	0.8	0.7
1970	0.8	1.1	1.0	0.8	0.8	0.5	0.5	0.4	0.7	0.9	1.1	0.9	0.7
1971	1.1	1.1	1.0	0.9	0.7	0.4	0.4	0.3	0.4	0.8	0.8	0.7	0.7
1972	1.0	1.0	1.0	0.7	0.7	0.4	0.4	0.4	0.5	0.9	0.8	0.8	0.7
1973	0.8	0.8	0.8	0.7	0.7	0.4	0.4	0.3	0.4	0.8	0.8	0.8	0.7
1974	0.8	0.8	0.8	0.7	0.7	0.4	0.4	0.4	0.5	0.9	0.8	0.8	0.7
1975	1.0	1.0	1.1	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1976	1.0	1.0	1.1	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1977	1.0	1.0	1.1	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1978	1.0	1.0	1.1	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1979	0.8	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1980	0.8	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1981	0.8	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1982	1.1	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1983	0.8	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1984	0.8	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1985	1.1	0.8	0.8	0.7	0.7	0.5	0.4	0.3	0.6	0.7	0.8	0.8	0.7
1986	0.9	0.6	0.9	0.9	0.5	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.7
1987	0.7	0.8	1.2	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.9	0.7	0.6
MEAN	0.9	0.9	1.0	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S22 (46.95N 90.50W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.8	3.6	5.1	3.4	2.7	2.0	1.2	1.5	2.2	3.5	4.6	3.8	
1957	2.8	3.2	2.9	3.6	2.7	1.3	2.0	1.8	2.8	2.4	4.4	3.8	
1958	3.9	2.2	2.4	4.5	2.4	2.1	1.3	1.7	2.9	2.9	3.4	3.4	
1959	3.4	2.5	4.4	2.3	2.0	1.5	1.2	2.0	2.3	3.1	3.7	3.5	
1960	3.1	2.9	3.3	3.2	1.4	1.5	1.7	2.1	3.1	3.1	4.5	3.2	
1961	3.6	2.7	3.2	2.5	2.1	1.6	2.0	1.4	2.2	2.3	3.1	3.1	
1962	3.3	2.8	3.5	3.0	2.1	1.5	1.6	1.2	1.8	2.3	3.2	3.2	
1963	2.9	3.7	3.7	2.7	1.8	1.7	1.2	1.4	2.2	2.3	3.1	3.7	
1964	4.2	3.0	2.9	2.6	3.2	1.3	0.9	2.4	2.6	2.6	3.1	2.8	
1965	3.4	3.6	3.7	1.8	1.7	1.5	1.2	1.2	1.7	3.5	4.9	4.0	
1966	4.1	3.1	6.3	3.9	2.2	1.6	1.2	1.9	2.5	4.5	3.9	3.0	
1967	6.6	3.7	3.2	2.3	3.8	2.3	2.9	1.8	2.8	4.0	3.1	3.2	
1968	3.3	3.7	4.2	3.8	2.9	1.9	2.1	1.5	1.5	3.0	4.9	3.3	
1969	3.7	3.6	4.3	3.4	1.5	1.7	1.4	1.8	1.7	2.6	3.1	3.5	
1970	3.1	3.3	3.3	2.8	2.6	1.7	1.3	1.4	3.0	2.9	3.2	3.7	
1971	3.5	4.3	4.9	2.8	2.4	1.3	1.4	1.2	1.2	3.1	3.1	2.8	
1972	4.5	3.3	3.6	2.7	2.6	1.4	1.1	1.1	2.0	3.4	3.2	5.1	
1973	2.8	2.3	3.1	1.6	2.6	1.2	1.1	0.9	1.7	2.8	2.7	3.9	
1974	2.5	3.3	3.2	1.6	2.1	1.7	1.4	1.2	1.5	2.2	3.3	3.1	
1975	4.0	3.8	5.9	2.9	1.3	1.5	1.4	1.4	2.3	2.0	5.1	2.9	
1976	3.1	3.2	5.6	2.6	2.1	1.8	1.0	1.2	1.5	1.8	2.8	2.8	
1977	3.0	5.0	5.2	2.1	1.2	1.2	1.4	1.3	3.1	2.8	3.0	4.5	
1978	3.5	2.5	2.6	2.4	1.1	1.7	1.1	1.2	3.4	2.0	2.1	2.6	
1979	2.0	3.3	3.2	3.2	2.2	1.1	0.9	1.2	1.7	2.9	2.7	2.9	
1980	3.1	3.6	3.1	1.7	2.0	1.6	0.8	1.2	2.5	2.7	2.8	2.8	
1981	2.7	2.7	3.3	2.6	1.3	1.6	1.0	1.2	2.6	3.0	2.7	2.2	
1982	3.8	2.4	3.2	3.1	1.6	1.5	1.0	1.0	1.9	2.9	3.3	3.5	
1983	3.2	4.3	3.6	2.5	1.8	1.3	1.2	1.0	1.4	2.6	4.0	3.6	
1984	2.9	2.7	3.8	3.1	2.4	1.3	1.2	1.4	1.7	3.4	3.8	3.1	
1985	3.7	3.1	6.8	3.3	1.7	1.9	1.1	1.3	1.8	2.2	2.8	4.2	
1986	3.4	3.2	3.4	3.2	2.4	1.2	1.6	1.2	2.7	2.9	2.9	2.6	
1987	2.5	3.7	3.9	2.0	2.8	1.1	1.3	1.5	1.5	3.2	2.6	3.0	

32 YR. STATISTICS FOR WIS STATION S22

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	68.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	675	1045	397	65	14	1	.	.	.	.	2197
0.50-0.99	.	413	1233	162	79	23	.	.	.	.	1910
1.00-1.49	.	.	404	448	94	62	1	.	.	.	1009
1.50-1.99	.	.	24	249	131	47	12	.	.	.	463
2.00-2.49	.	.	.	51	85	56	5	3	.	.	200
2.50-2.99	.	.	.	3	109	37	3	7	1	.	160
3.00-3.49	8	114	.	4	1	.	126
3.50-3.99	25	.	.	1	.	27
4.00-4.49	4	1	.	2	.	12
4.50-4.99	1	1	1	.	5
5.00-5.49	2	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	675	1458	2058	978	520	369	29	15	5	4	
MEAN HS(M) = 0.9	LARGEST HS(M)= 5.3		MEAN TP(SEC)= 4.3		NO. OF CASES= 5729.						

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	500	726	305	45	7						1583
0.50-0.99		267	712	145	45	11	.	.	.	.	1180
1.00-1.49			131	224	48	35	1	1	.	.	440
1.50-1.99				85	73	43	3		1	.	210
2.00-2.49			5	20	21	40	7	3	.	.	91
2.50-2.99				1	24	25	7	7	.	.	64
3.00-3.49					3	47	6	6	1	.	63
3.50-3.99						17	6	4	1	1	29
4.00-4.49						1	6	3	2	2	14
4.50-4.99							3	2	2	1	8
5.00-5.49									3	1	4
5.50-5.99										1	1
6.00-6.49										1	1
6.50-6.99										1	1
7.00+											0
TOTAL	500	993	1153	520	221	219	39	26	10	8	
MEAN HS(M) = 0.8	LARGEST HS(M)= 6.6		MEAN TP(SEC)= 4.2		NO. OF CASES= 3467.						

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	541	777	407	45	5	2	1	.	.	.	1778
0.50-0.99	.	239	730	177	42	16	.	.	.	.	1204
1.00-1.49	.	.	167	240	49	20	2	.	.	.	480
1.50-1.99	.	.	3	86	63	42	5	2	.	.	201
2.00-2.49	.	.	.	18	20	33	7	3	.	.	81
2.50-2.99	.	.	.	1	24	13	10	2	.	.	50
3.00-3.49	6	23	4	4	.	1	38
3.50-3.99	7	1	1	.	3	15
4.00-4.49	2	6	1	2	1	12
4.50-4.99	3	3	.	.	7
5.00-5.49	2	.	2
5.50-5.99	1	.	.	1
6.00-6.49	1	2	3
6.50-6.99	1	1
7.00+	0
TOTAL	541	1016	1307	567	209	158	42	19	6	8	
MEAN HS(M) = 0.7	LARGEST HS(M)= 6.6		MEAN TP(SEC)= 4.1		NO. OF CASES= 3638.						

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	500	806	322	51	3	1	.	.	.	.	1683
0.50-0.99	.	499	1130	181	37	11	.	1	.	.	1859
1.00-1.49	.	.	557	174	45	31	1	1	.	.	809
1.50-1.99	.	.	47	160	48	29	4	.	.	.	288
2.00-2.49	.	.	.	86	31	21	7	3	1	.	149
2.50-2.99	.	.	.	18	37	22	7	3	2	.	89
3.00-3.49	.	.	.	1	11	36	5	2	4	.	59
3.50-3.99	4	17	2	3	3	.	30
4.00-4.49	3	.	4	2	1	17
4.50-4.99	2	4	4	.	8
5.00-5.49	3	4	.	7
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	1	1
7.00+	0
TOTAL	500	1305	2056	671	216	171	35	22	21	3	4692
MEAN HS (M) = 0.8	LARGEST HS (M) = 6.8		MEAN TP (SEC) = 4.1		NO. OF CASES =						

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	958	1535	583	72	3	1	.	.	.	.	3152
0.50-0.99	.	1111	2162	222	54	10	.	.	.	.	3559
1.00-1.49	.	.	1377	57	47	31	8	1	1	.	1522
1.50-1.99	.	.	152	179	45	33	5	1	2	.	417
2.00-2.49	.	.	.	214	9	18	5	6	3	1	253
2.50-2.99	.	.	.	67	28	8	1	6	2	.	113
3.00-3.49	.	.	.	4	34	3	3	2	2	1	49
3.50-3.99	6	2	1	.	1	1	10
4.00-4.49	1	.	.	.	2	.	3
4.50-4.99	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	958	2646	4274	815	227	106	23	16	11	4	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 8507.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1012	1265	413	50	7	2	.	.	1	.	2750
0.50-0.99	.	775	1104	122	41	10	1	.	.	.	2053
1.00-1.49	.	.	580	13	29	23	1	3	.	.	649
1.50-1.99	.	.	45	60	3	7	3	.	1	.	119
2.00-2.49	.	.	.	36	1	2	1	2	.	.	41
2.50-2.99	.	.	.	1	1	1	.	.	.	.	3
3.00-3.49	0
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1012	2040	2142	282	82	45	6	5	2	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 5265.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1049	1177	397	55	4	1	.	.	.	.	2683
0.50-0.99	.	577	671	74	31	12	.	.	.	.	1365
1.00-1.49	.	.	285	3	11	11	.	.	.	.	304
1.50-1.99	.	.	8	26	1	2	.	.	1	.	38
2.00-2.49	.	.	.	6	.	1	.	.	1	.	7
2.50-2.99	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1049	1754	1361	164	41	25	2	0	2	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 4121.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	895	900	274	48	13	.	1	1	1	.	2131
0.50-0.99	.	728	565	32	20	4	1	.	.	.	1351
1.00-1.49	.	.	245	24	2	.	.	.	.	.	247
1.50-1.99	.	.	23	6	.	2	.	.	.	.	49
2.00-2.49	1	.	.	6
2.50-2.99	1
3.00-3.49	0
3.50-3.99	1	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	895	1628	1107	110	35	6	1	2	1	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 3547.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	990	952	309	52	6	.	1	.	.	.	2310
0.50-0.99	.	1034	762	39	13	.	.	.	.	.	1852
1.00-1.49	.	.	379	1	5	3	.	.	.	.	388
1.50-1.99	.	.	66	24	.	.	1	.	.	.	91
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	990	1986	1516	120	24	7	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 4350.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	798	1160	234	51	6	2	.	.	1	.	2252
0.50-0.99	.	1509	503	35	17	7	.	.	.	.	2071
1.00-1.49	.	.	324	2	.	3	.	1	1	.	331
1.50-1.99	.	.	101	16	.	.	.	.	.	.	117
2.00-2.49	.	.	.	4	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	798	2669	1162	108	23	12	0	1	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4470.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	914	1214	325	91	10	2	.	.	1	.	2557
0.50-0.99	.	1584	373	52	22	7	.	.	.	.	2038
1.00-1.49	.	.	276	4	2	9	.	.	1	.	288
1.50-1.99	.	.	52	5	.	.	.	.	.	.	56
2.00-2.49	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	914	2798	1026	152	34	18	0	0	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4631.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1107	1282	368	110	26	5	.	.	.	.	2898
0.50-0.99	.	1404	237	47	37	16	1	.	.	.	1742
1.00-1.49	.	.	239	6	2	6	1	.	.	.	248
1.50-1.99	.	.	51	4	.	1	1	.	.	.	59
2.00-2.49	.	.	1	.	.	.	.	1	.	.	6
2.50-2.99	2	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1107	2686	896	167	65	28	3	3	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 4640.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1742	1983	792	175	29	4	1	1			4727
0.50-0.99		1882	233	208	94	39	3		1		2460
1.00-1.49			494	25	41	21	2	1			584
1.50-1.99			62	1	5	4	1				74
2.00-2.49			4	1		1					6
2.50-2.99											0
3.00-3.49									1		1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1742	3865	1585	410	169	69	7	3	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 7350.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1762	2322	799	122	16	4					5025
0.50-0.99		2765	671	549	84	26	2				4097
1.00-1.49			690	404	223	28	1				1346
1.50-1.99			192	50	237	101	2				582
2.00-2.49			3	3	18	79		1			104
2.50-2.99						2	3				5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1762	5087	2355	1128	578	240	8	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 10446.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1335	2205	828	106	26	3					4503
0.50-0.99		2809	1490	521	96	34		1			4951
1.00-1.49			671	809	165	38	2				1685
1.50-1.99			242	248	379	28		1			900
2.00-2.49			7	16	217	192	2				434
2.50-2.99				1	3	43			1		48
3.00-3.49						2	2				4
3.50-3.99											0
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1335	5014	3238	1701	886	340	9	2	1	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 11726.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	805	1150	572	72	17	2					2618
0.50-0.99		875	1436	219	77	31					2638
1.00-1.49			340	639	71	44	3				1097
1.50-1.99			44	293	163	20	4				524
2.00-2.49				57	204	41		2			304
2.50-2.99					74	60			1		135
3.00-3.49					4	49				1	54
3.50-3.99						17					17
4.00-4.49						1	3				4
4.50-4.99							2				2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	805	2025	2392	1280	610	265	12	2	1	1	

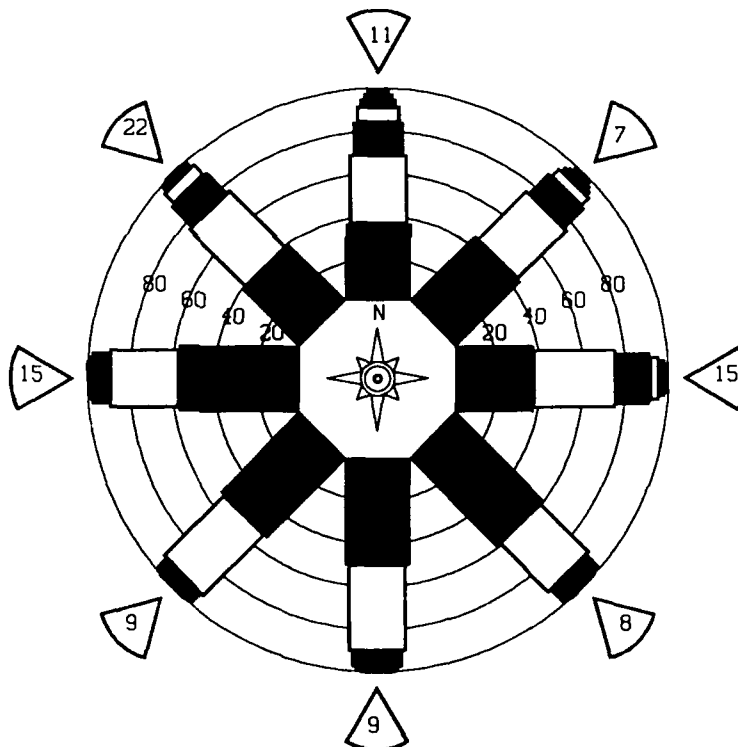
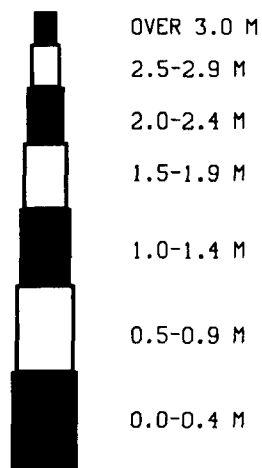
MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 6925.

STATION S23 46.80N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1559	2050	733	121	19	3	.	.	.	.	4485
0.50-0.99	.	1847	1401	279	79	26	.	.	.	.	3632
1.00-1.49	.	.	716	304	83	37	2	1	.	.	1143
1.50-1.99	.	.	112	151	115	36	4	.	.	.	418
2.00-2.49	.	.	1	53	60	48	3	2	.	.	167
2.50-2.99	.	.	.	9	30	21	3	2	.	.	65
3.00-3.49	6	27	2	1	.	.	36
3.50-3.99	1	8	1	.	.	.	10
4.00-4.49	1	2	.	.	.	3
4.50-4.99	1	.	1	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1559	3897	2963	917	393	207	18	6	1	0	93504

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.

STATION 23
46.80N, 90.50 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S23 (46.80N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.5	0.7	0.9	0.9	0.7	0.5	0.4	0.4	0.5	0.8	1.2	0.9	0.7
1957	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.5	0.6	1.0	0.8	0.7
1958	0.7	1.1	0.5	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.7	0.6
1959	0.8	0.7	0.7	0.6	0.6	0.4	0.3	0.4	0.6	0.7	0.9	0.8	0.6
1960	0.8	0.9	0.8	0.8	0.7	0.4	0.3	0.4	0.5	0.6	1.0	0.8	0.7
1961	0.7	0.7	0.9	0.7	0.6	0.4	0.3	0.3	0.5	0.6	0.7	0.7	0.6
1962	1.0	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.7	1.0	0.6
1963	0.8	0.9	0.9	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.9	0.9	0.6
1964	0.9	0.8	0.9	0.7	0.6	0.4	0.3	0.5	0.5	0.6	0.8	0.6	0.6
1965	0.9	0.9	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.8	1.0	1.1	0.7
1966	1.0	0.9	1.5	0.8	0.8	0.5	0.4	0.5	0.6	0.9	1.0	0.9	0.8
1967	1.2	1.0	0.9	0.7	0.7	0.5	0.4	0.5	0.6	1.0	0.9	1.1	0.8
1968	0.9	1.3	1.0	0.9	0.6	0.5	0.5	0.5	0.5	0.7	1.1	1.2	0.8
1969	1.0	0.7	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.7	0.7	0.6
1970	0.8	0.9	0.7	0.8	0.8	0.5	0.5	0.4	0.6	0.6	0.9	0.8	0.7
1971	0.9	1.0	0.9	0.8	0.6	0.4	0.4	0.3	0.4	0.6	0.8	0.7	0.6
1972	0.9	0.8	1.0	0.6	0.5	0.4	0.3	0.3	0.5	0.8	0.6	0.8	0.6
1973	0.7	0.8	0.8	0.7	0.6	0.4	0.3	0.3	0.5	0.6	0.8	0.8	0.6
1974	0.7	0.6	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.9	0.8	0.6
1975	0.9	0.7	1.1	0.6	0.4	0.4	0.4	0.4	0.5	0.7	1.0	0.7	0.7
1976	0.9	0.8	1.2	0.7	0.6	0.5	0.3	0.3	0.4	0.6	0.4	0.6	0.6
1977	0.7	1.0	1.1	0.5	0.4	0.3	0.3	0.3	0.5	0.6	0.7	0.9	0.6
1978	0.9	0.6	1.5	0.7	0.5	0.3	0.3	0.4	0.7	0.6	0.7	0.7	0.6
1979	0.7	0.6	0.9	0.6	0.4	0.4	0.3	0.4	0.5	0.7	0.7	0.7	0.6
1980	0.8	0.6	0.7	0.6	0.4	0.5	0.3	0.4	0.5	0.7	0.6	0.8	0.6
1981	0.7	0.8	0.8	0.6	0.4	0.4	0.3	0.3	0.6	0.7	0.7	0.6	0.6
1982	1.0	0.7	0.9	0.7	0.6	0.4	0.3	0.3	0.6	0.7	0.8	0.9	0.6
1983	0.9	0.8	1.2	0.6	0.6	0.4	0.3	0.3	0.5	0.6	1.0	0.9	0.7
1984	0.7	0.8	1.0	0.8	0.5	0.4	0.3	0.3	0.5	0.7	0.8	0.8	0.6
1985	1.0	0.8	1.1	0.7	0.5	0.4	0.3	0.4	0.4	0.6	0.7	0.9	0.6
1986	0.9	0.9	0.9	0.8	0.5	0.4	0.3	0.3	0.5	0.6	0.8	0.7	0.6
1987	0.7	0.7	1.0	0.5	0.5	0.3	0.3	0.3	0.4	0.7	0.8	0.7	0.6
MEAN	0.8	0.8	0.9	0.7	0.6	0.4	0.3	0.4	0.5	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S23 (46.80N 90.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.4	2.7	3.9	3.3	2.0	1.6	1.2	1.3	1.7	2.2	4.7	2.9	
1957	1.1	2.3	2.2	3.3	2.4	1.6	1.4	1.4	1.1	2.2	4.7	4.1	
1958	0.0	1.1	1.1	3.3	2.6	1.1	1.1	1.3	1.1	2.2	2.7	2.4	
1959	2.7	2.5	1.7	2.7	1.6	1.0	1.0	1.3	2.2	2.2	3.3	4.6	
1960	3.3	3.3	3.3	2.4	2.2	1.1	1.1	1.4	1.1	2.2	3.3	3.8	
1961	3.3	3.3	3.3	2.3	2.0	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1962	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1963	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1964	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1965	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1966	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1967	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1968	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1969	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1970	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1971	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1972	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1973	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1974	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1975	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1976	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1977	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1978	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1979	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1980	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1981	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1982	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1983	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1984	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1985	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1986	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	
1987	3.3	3.3	3.3	2.3	2.3	1.1	1.1	1.1	1.1	2.2	2.2	3.3	

32 YR. STATISTICS FOR WIS STATION S23

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	64.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030421

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	836	1036	475	77	10	1	.	.	.	.	2435
0.50-0.99	.	472	1245	168	82	28	2	.	.	.	1997
1.00-1.49	.	.	442	443	115	51	4	.	.	.	1055
1.50-1.99	.	.	25	250	135	42	8	.	.	.	460
2.00-2.49	.	.	.	79	77	73	3	6	.	.	238
2.50-2.99	.	.	.	5	80	40	2	4	1	.	132
3.00-3.49	10	122	5	2	1	.	134
3.50-3.99	53	.	.	.	.	59
4.00-4.49	3	10	.	2	1	17
4.50-4.99	1	2	2	1	.	7
5.00-5.49	1	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	836	1508	2187	1022	509	414	36	14	5	2	6127

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 6127.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	577	675	347	65	8	1	.	.	.	.	1673
0.50-0.99	.	295	675	133	41	17	1	.	.	.	1162
1.00-1.49	.	.	140	211	57	36	2	1	.	.	447
1.50-1.99	.	.	3	80	67	32	9	3	.	.	194
2.00-2.49	.	.	.	23	16	33	12	5	.	.	89
2.50-2.99	.	.	.	3	28	19	8	5	1	.	64
3.00-3.49	4	35	3	6	.	1	49
3.50-3.99	13	11	9	1	.	34
4.00-4.49	7	2	6	2	17
4.50-4.99	1	4	1	1	7
5.00-5.49	1	.	1
5.50-5.99	2	2
6.00-6.49	2	2
6.50-6.99	0
7.00+	0
TOTAL	577	970	1165	515	221	186	54	35	10	8	3516

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 3516.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	623	790	447	69	7	3	1	.	.	.	1940
0.50-0.99	.	291	665	137	49	19	1	1	.	.	1163
1.00-1.49	.	.	189	190	51	23	2	2	.	.	457
1.50-1.99	.	.	2	86	36	38	7	2	.	.	171
2.00-2.49	.	.	.	22	17	24	7	4	.	1	75
2.50-2.99	.	.	.	5	23	7	4	4	1	.	44
3.00-3.49	2	24	6	3	.	3	35
3.50-3.99	2	3	3	1	.	9
4.00-4.49	3	5	2	1	.	11
4.50-4.99	3	5	.	8
5.00-5.49	1	2	.	3
5.50-5.99	1	1	2
6.00-6.49	1	2	3
6.50-6.99	0
7.00+	0
TOTAL	623	1081	1303	509	185	143	36	22	12	7	3682

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3682.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	598	788	421	74	5	1	.	.	.	.	1887
0.50-0.99	.	819	1023	179	49	18	.	2	.	.	2090
1.00-1.49	.	.	376	109	44	38	4	.	.	.	571
1.50-1.99	.	.	90	101	32	23	6	1	.	.	254
2.00-2.49	.	.	1	71	21	12	9	3	3	.	120
2.50-2.99	.	.	.	16	21	14	3	2	2	1	59
3.00-3.49	.	.	.	1	8	14	3	1	4	.	31
3.50-3.99	1	9	1	5	1	1	18
4.00-4.49	6	.	4	.	10
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	598	1607	1911	551	181	129	32	15	16	2	4732

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 4732.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1148	1371	612	108	8	1					3248
0.50-0.99		2329	1732	195	75	25	2				4358
1.00-1.49			719	37	56	37	13				866
1.50-1.99			226	100	17	24	8	2	2		383
2.00-2.49				115		5	4	6	3		139
2.50-2.99			6	42		2	2	1	1		48
3.00-3.49				2	3					2	7
3.50-3.99							1		1	1	3
4.00-4.49								1			2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1148	3700	3295	599	159	94	30	17	9	3	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 8481.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1197	1229	444	72	12	1			1		2956
0.50-0.99		1559	585	91	50	24	2	1			2312
1.00-1.49			268	2	17	24	3	4			316
1.50-1.99			39	21		5	1	2		1	69
2.00-2.49						1					3
2.50-2.99				1							1
3.00-3.49										1	1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1197	2788	1336	189	79	53	6	7	1	2	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5300.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1219	1192	442	79	9	3					2944
0.50-0.99		1133	162	52	36	20	1				1404
1.00-1.49			51	1	4	9					65
1.50-1.99			4			1	1				6
2.00-2.49								1			1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1219	2325	659	132	49	33	2	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4139.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1072	1106	279	70	14	1		1	1		2544
0.50-0.99		798	65	27	13	4					907
1.00-1.49			67	1		3					71
1.50-1.99			7								7
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99										1	1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1072	1904	418	98	27	8	0	1	1	1	

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3308.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =180.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1167	1255	334	74	8		1				2839
0.50-0.99		1012	67	24	17	5					1125
1.00-1.49			148		1	4					153
1.50-1.99			2			1	1				4
2.00-2.49			1								1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1167	2267	552	98	26	10	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3861.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =202.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	904	1117	242	79	14	2			1		2359
0.50-0.99		1404	245	20	14	3			1		1687
1.00-1.49			212	1		1		1			215
1.50-1.99			44	1			1				46
2.00-2.49											1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	904	2521	743	102	28	6	1	1	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 4036.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =225.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1008	1090	333	102	12	4					2549
0.50-0.99		1628	376	28	21	13			1		2067
1.00-1.49			262			5					267
1.50-1.99			54	3							57
2.00-2.49				2							2
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1008	2718	1025	135	33	22	0	0	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4629.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =247.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1220	1276	339	100	24	8			1		2968
0.50-0.99		1676	286	36	34	16	2				2050
1.00-1.49			305			4	1				310
1.50-1.99			64	8			1				73
2.00-2.49			1	5				1			7
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1220	2952	995	149	58	28	4	2	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 5065.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1909	2073	725	203	38	5	1	1	.	.	4955
0.50-0.99	.	2188	203	173	98	40	2	.	.	.	2704
1.00-1.49	.	.	590	8	33	23	2	2	.	.	658
1.50-1.99	.	.	66	.	2	5	1	.	.	.	74
2.00-2.49	.	.	2	1	.	.	1	.	.	.	4
2.50-2.99	1	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1909	4261	1586	385	171	73	7	3	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 7857.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1824	2311	711	137	18	4	.	.	.	.	5005
0.50-0.99	.	3081	559	519	83	29	1	.	.	.	4272
1.00-1.49	.	.	803	140	235	52	.	.	.	.	1230
1.50-1.99	.	.	257	14	93	101	2	1	.	.	468
2.00-2.49	.	.	3	6	.	20	4	.	1	.	34
2.50-2.99	2	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1824	5392	2333	816	429	206	9	1	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10305.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1468	2029	821	125	20	5	.	.	.	.	4468
0.50-0.99	.	3087	1137	716	63	34	2	1	.	.	5060
1.00-1.49	.	.	758	466	228	34	6	.	.	.	1492
1.50-1.99	.	.	336	69	365	130	1	1	.	.	902
2.00-2.49	.	.	5	17	33	130	2	.	.	.	187
2.50-2.99	13	4	.	.	.	17
3.00-3.49	1	.	.	.	1	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1468	5116	3077	1393	709	347	15	2	0	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 11351.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	982	1129	599	84	23	.	.	.	.	.	2817
0.50-0.99	.	1132	1248	329	69	35	.	.	.	.	2813
1.00-1.49	.	.	353	517	104	35	4	1	.	.	1014
1.50-1.99	.	.	82	178	222	29	2	.	.	.	513
2.00-2.49	.	.	2	48	110	99	1	2	.	1	263
2.50-2.99	.	.	.	6	50	33	.	.	1	.	90
3.00-3.49	3	56	.	.	.	.	58
3.50-3.99	17	2	.	.	.	19
4.00-4.49	1	4	.	.	.	5
4.50-4.99	2	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	982	2261	2284	1162	581	305	13	5	1	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 7115.

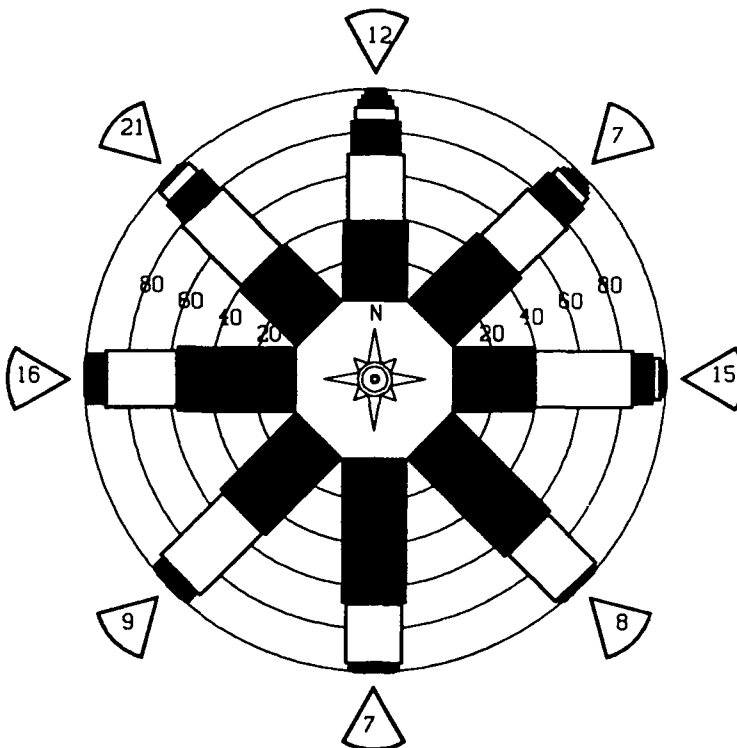
STATION S24 46.65N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1776	2047	757	152	23	4	.	.	.	.	4759
0.50-0.99	.	2291	1030	283	80	33	1	.	.	.	3718
1.00-1.49	.	.	569	213	95	38	4	1	.	.	920
1.50-1.99	.	.	130	91	97	43	5	1	.	.	367
2.00-2.49	.	.	2	39	27	40	4	2	.	.	114
2.50-2.99	.	.	.	8	20	13	2	1	.	.	44
3.00-3.49	3	25	1	.	.	.	29
3.50-3.99	9	2	1	.	.	12
4.00-4.49	3	.	1	.	4
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1776	4338	2488	786	345	205	22	7	1	0	
MEAN HS(M)= 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.											

STATION 24
46.65N, 90.50 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S24 (46.65N 90.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.7	0.8	0.8	0.6	0.4	0.4	0.4	0.5	0.7	1.1	0.9	0.7
1957	0.8	0.7	0.6	0.6	0.7	0.4	0.3	0.4	0.5	0.6	0.9	0.7	0.6
1958	0.6	1.0	0.5	0.7	0.5	0.4	0.4	0.4	0.5	0.6	0.9	0.7	0.6
1959	0.7	0.7	0.7	0.5	0.6	0.4	0.3	0.3	0.5	0.6	0.8	0.8	0.8
1960	0.8	0.9	0.7	0.7	0.6	0.3	0.3	0.3	0.5	0.6	0.9	0.7	0.8
1961	0.7	0.6	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.8	0.6	0.6
1962	0.9	0.8	0.7	0.6	0.5	0.3	0.3	0.3	0.4	0.6	0.9	0.6	0.6
1963	0.8	0.8	0.8	0.6	0.5	0.3	0.3	0.3	0.4	0.6	0.8	0.9	0.6
1964	0.8	0.8	0.8	0.7	0.7	0.4	0.3	0.3	0.5	0.6	0.7	1.0	0.6
1965	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.5	0.6	0.8	0.8	0.6
1966	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.5	0.6	0.8	0.8	0.6
1967	1.1	1.3	0.8	0.7	0.6	0.4	0.4	0.5	0.5	0.6	1.0	0.8	0.6
1968	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1969	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1970	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1971	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1972	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1973	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1974	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1975	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1976	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1977	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1978	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1979	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1980	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1981	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1982	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1983	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1984	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1985	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1986	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
1987	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.4	0.5	0.6	0.8	0.8	0.6
MEAN	0.8	0.8	0.8	0.6	0.5	0.4	0.3	0.3	0.5	0.6	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S24 (46.65N 90.50W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.3	2.2	3.0	3.6	1.9	1.5	1.2	1.1	1.5	2.2	4.7	2.8	
1957	2.1	2.2	1.9	2.8	2.3	1.1	1.3	1.3	1.8	2.7	4.8	4.4	
1958	4.1	3.6	1.5	3.3	1.4	1.5	1.0	1.2	1.7	1.9	2.3	2.2	
1959	2.4	2.6	4.8	1.5	1.5	1.2	1.0	1.3	1.6	3.5	3.6	4.3	
1960	3.1	3.2	3.2	2.4	3.1	1.0	0.9	1.2	1.5	2.2	3.7	3.3	
1961	3.6	2.7	2.4	2.1	1.6	1.3	1.3	1.0	1.3	1.7	2.3	3.0	
1962	2.8	3.2	2.7	1.8	1.4	1.1	1.2	1.0	1.4	1.9	2.5	3.1	
1963	2.8	3.2	4.3	2.5	1.4	1.2	0.9	1.4	1.9	1.4	0.0	3.2	
1964	3.6	3.3	2.8	3.0	1.6	1.3	0.7	1.7	1.5	2.8	2.0	1.8	
1965	3.2	2.8	3.7	1.8	1.3	1.1	0.9	1.2	1.4	3.6	3.2	3.2	
1966	2.7	2.7	5.1	2.6	1.9	1.4	1.0	1.3	2.3	4.3	3.7	2.3	
1967	6.4	3.0	2.4	2.5	3.4	1.8	2.6	1.7	2.2	2.9	3.6	2.4	
1968	3.0	3.5	4.1	3.5	1.7	1.5	1.8	1.3	1.3	3.0	4.3	4.9	
1969	3.1	3.5	4.3	4.0	1.3	1.2	1.2	1.5	1.2	1.5	1.1	3.1	
1970	3.2	3.6	3.3	1.8	2.3	1.2	1.3	1.2	1.7	2.2	3.3	3.0	
1971	3.4	3.4	4.4	2.2	2.2	1.1	0.9	0.9	0.9	2.4	2.1	2.0	
1972	2.9	3.4	4.3	2.3	2.3	1.3	0.7	0.9	1.3	2.1	3.2	4.1	
1973	2.6	2.0	2.4	1.6	2.2	0.9	1.0	0.8	1.2	1.9	8.8	4.1	
1974	1.7	3.0	2.1	2.2	1.2	1.4	1.3	1.0	1.1	1.5	6.6	2.3	
1975	3.5	2.0	6.3	1.8	1.1	1.0	0.9	1.4	1.9	1.6	5.5	2.9	
1976	2.4	3.5	4.9	2.6	2.3	2.0	0.9	0.8	1.2	1.5	8.8	3.1	
1977	1.9	4.2	5.1	2.3	1.0	1.1	1.2	0.8	2.1	2.1	2.0	3.0	
1978	3.6	2.2	1.8	1.6	1.7	0.8	0.9	1.1	3.5	1.9	3.3	2.2	
1979	2.1	2.1	3.7	2.0	1.4	0.9	0.7	1.1	1.7	3.3	3.3	2.5	
1980	2.4	2.9	2.1	1.6	1.4	1.2	0.8	0.9	1.8	1.9	1.7	1.9	
1981	2.3	2.2	2.7	1.7	1.4	1.4	0.7	0.9	1.7	2.6	6.7	1.8	
1982	3.7	1.8	3.3	3.6	1.2	1.3	0.9	0.7	1.7	3.3	3.6	3.9	
1983	3.6	4.1	3.4	2.1	1.5	1.1	1.2	1.0	1.2	1.6	4.4	3.7	
1984	1.9	3.0	4.3	3.0	1.6	1.3	1.0	1.4	2.3	2.1	2.1	2.1	
1985	3.4	2.7	6.2	3.0	1.7	1.4	0.7	1.1	1.3	2.6	2.0	4.7	
1986	3.6	2.3	3.7	2.1	2.0	1.1	1.3	1.1	1.8	2.2	3.3	1.6	
1987	2.7	4.0	3.1	1.5	2.2	0.7	0.9	0.9	1.3	3.7	3.0	3.4	

32 YR. STATISTICS FOR WIS STATION S24

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.6
MEAN PEAK WAVE PERIOD (SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	31.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67010712

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	691	909	418	65	10	2	1	.	.	.	2096
0.50-0.99	.	380	1141	132	38	14	1	.	.	.	1706
1.00-1.49	.	.	333	459	60	23	3	.	.	.	878
1.50-1.99	.	.	18	209	131	25	4	.	.	1	388
2.00-2.49	.	.	.	53	49	42	1	7	.	.	152
2.50-2.99	.	.	.	1	81	26	2	2	.	.	112
3.00-3.49	3	126	1	1	1	.	131
3.50-3.99	49	12	1	1	.	63
4.00-4.49	1	14	1	1	.	17
4.50-4.99	3	2	2	.	7
5.00-5.49	1	.	1	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	691	1289	1910	919	372	308	41	15	5	2	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 5208.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	601	724	373	55	8	2	.	.	.	.	1763
0.50-0.99	.	274	712	108	38	18	2	.	.	.	1152
1.00-1.49	.	.	156	201	41	33	4	.	.	.	435
1.50-1.99	.	.	6	80	56	33	5	.	.	.	183
2.00-2.49	.	.	.	16	9	20	8	5	1	.	59
2.50-2.99	.	.	.	1	26	17	3	1	1	.	48
3.00-3.49	1	28	9	3	1	.	41
3.50-3.99	3	10	3	1	.	21
4.00-4.49	1	5	3	1	.	15
4.50-4.99	3	1	.	3
5.00-5.49	1	2	3
5.50-5.99	1	.	.	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	601	998	1247	461	179	153	46	27	8	5	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3497.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	746	813	439	81	13	7	.	.	.	.	2099
0.50-0.99	.	315	632	117	44	16	.	1	.	.	1125
1.00-1.49	.	.	179	181	32	25	5	2	.	.	424
1.50-1.99	.	.	12	91	32	23	5	2	.	1	166
2.00-2.49	.	.	1	26	16	11	7	5	1	2	69
2.50-2.99	.	.	.	1	22	11	3	1	1	2	41
3.00-3.49	1	9	3	1	.	.	14
3.50-3.99	1	4	5	2	.	.	12
4.00-4.49	1	1	.	.	2
4.50-4.99	2	1	3	6
5.00-5.49	1	3	.	4
5.50-5.99	1	.	1
6.00-6.49	2	2
6.50-6.99	0
7.00+	0
TOTAL	746	1128	1263	497	161	106	29	18	7	10	

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3725.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	801	1052	583	121	11	4	.	2	.	.	2572
0.50-0.99	.	773	501	152	44	33	4	2	.	.	1509
1.00-1.49	.	.	149	59	41	32	8	1	1	.	291
1.50-1.99	.	.	35	49	18	27	9	4	2	.	144
2.00-2.49	.	.	10	14	3	20	5	6	2	1	61
2.50-2.99	.	.	.	4	10	5	4	4	3	1	31
3.00-3.49	2	6	.	2	3	.	13
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	801	1825	1278	399	129	129	31	19	11	2	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4341.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1628	2382	729	201	26	3					4969
0.50-0.99		2480	186	219	103	51	9	1			3049
1.00-1.49			316	26	73	54	18	7			496
1.50-1.99			148	1	6	19	9	11	8		202
2.00-2.49			19	1	1	4	5	1		1	32
2.50-2.99								1	1	1	4
3.00-3.49									5		5
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1628	4862	1398	449	209	131	41	21	16	2	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 8201.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1423	1426	484	98	21	7					3459
0.50-0.99		1435	111	56	58	33	4	3			1700
1.00-1.49			120		2	12	6	5	1	1	147
1.50-1.99			19				1	2			22
2.00-2.49			1								1
2.50-2.99										1	1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1423	2861	735	154	81	52	11	10	1	2	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4992.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1295	1143	370	96	18	3					2925
0.50-0.99		1040	139	22	28	23	2				1254
1.00-1.49			47	1	1	1					50
1.50-1.99			7					1			9
2.00-2.49											0
2.50-2.99										1	1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1295	2183	563	119	47	28	2	1	0	1	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 3968.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1138	1081	271	60	10	2					2562
0.50-0.99		768	68	3	8	3		1			851
1.00-1.49			63			3	2	1			69
1.50-1.99			5								5
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1138	1849	407	63	18	8	2	2	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3267.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1296	1252	284	65	21	3					2922
0.50-0.99		856	53	6	21	8	1	.	.	.	929
1.00-1.49			130		6			.	.	.	131
1.50-1.99			1					1	.	.	2
2.00-2.49									.	.	0
2.50-2.99									.	.	0
3.00-3.49									.	.	0
3.50-3.99									.	.	0
4.00-4.49									.	.	0
4.50-4.99									.	.	0
5.00-5.49									.	.	0
5.50-5.99									.	.	0
6.00-6.49									.	.	0
6.50-6.99									.	.	0
7.00+									.	.	0
TOTAL	1296	2108	468	71	28	11	1	1	0	0	
MEAN HS(M) = 0.4	LARGEST HS(M)= 1.9		MEAN TP(SEC)= 2.9		NO. OF CASES= 3730.						

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	998	1151	224	62	12	1	.	.	.	.	2448
0.50-0.99	.	1176	115	5	5	3	.	1	.	.	1305
1.00-1.49	.	.	183	.	.	1	.	1	.	.	185
1.50-1.99	.	.	28	.	.	.	.	.	.	.	28
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	998	2327	550	68	17	5	0	2	0	0	
MEAN HS(M) = 0.4	LARGEST HS(M) = 2.0		MEAN TP(SEC) = 3.0		NO. OF CASES = 3716.						

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1088	1258	271	81	11	3	.	.	.	.	2712
0.50-0.99	.	1531	335	14	7	9	.	.	.	.	1836
1.00-1.49	.	.	281	1	.	3	.	1	.	.	287
1.50-1.99	.	.	57	3	.	.	.	.	.	.	60
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1088	2789	944	101	18	15	1	1	0	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.2		MEAN TP (SEC) = 3.1		NO. OF CASES = 4643.						

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1163	1326	296	82	17	2		1	.	.	2887
0.50-0.99		1793	643	34	16	16	2		.	.	2504
1.00-1.49	.	.	489						.	.	489
1.50-1.99	.	.	112	47	.	.	.	1	.	.	160
2.00-2.49	.	.	.	38	.	.	.	.	.	.	38
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1163	3119	1540	203	33	18	2	2	0	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.7		MEAN TP (SEC) = 3.2		NO. OF CASES = 5690.						

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1765	1405	572	93	21	2	1	.	.	.	3858
0.50-0.99	.	2138	1410	156	36	12	1	.	.	.	3753
1.00-1.49	.	.	855	224	29	6	1	.	.	.	913
1.50-1.99	.	.	249	181	13	4	.	.	.	.	447
2.00-2.49	.	.	.	58	2	3	1	.	.	.	61
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1765	3543	3086	512	102	27	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 8461.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1707	1735	586	83	11	6	.	1	.	.	4129
0.50-0.99	.	2182	2215	268	49	7	.	.	.	.	4721
1.00-1.49	.	.	1517	128	71	7	1	1	.	.	1725
1.50-1.99	.	.	366	293	186	50	.	.	.	.	895
2.00-2.49	.	.	.	187	39	142	1	.	.	.	369
2.50-2.99	.	.	.	22	1	55	3	.	.	.	81
3.00-3.49	.	.	.	1	1	3	2	.	.	.	7
3.50-3.99	1	.	.	2	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1707	3917	4684	982	359	270	7	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 11167.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1248	1774	649	87	9	2	.	.	.	.	3769
0.50-0.99	.	1251	2758	345	31	18	.	.	.	.	4403
1.00-1.49	.	.	1982	376	62	9	2	.	.	.	2431
1.50-1.99	.	.	287	571	324	16	.	.	.	.	1198
2.00-2.49	.	.	.	295	226	198	.	.	.	.	719
2.50-2.99	.	.	.	42	23	284	6	.	.	1	356
3.00-3.49	.	.	.	1	1	47	10	.	.	.	59
3.50-3.99	1	2	1	.	.	.	4
4.00-4.49	1	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1248	3025	5676	1717	677	576	19	1	0	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 12110.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	727	968	425	70	17	3	.	.	.	.	2210
0.50-0.99	.	473	1550	202	31	17	.	.	.	.	2273
1.00-1.49	.	.	666	555	47	18	2	.	.	.	1288
1.50-1.99	.	.	64	367	217	12	1	1	.	.	652
2.00-2.49	.	.	.	116	164	62	2	.	.	.	345
2.50-2.99	.	.	.	3	112	146	.	.	.	.	261
3.00-3.49	5	143	.	.	.	.	148
3.50-3.99	39	9	.	.	.	48
4.00-4.49	8	.	.	.	8
4.50-4.99	2	1	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	727	1441	2705	1313	593	440	24	3	1	0	

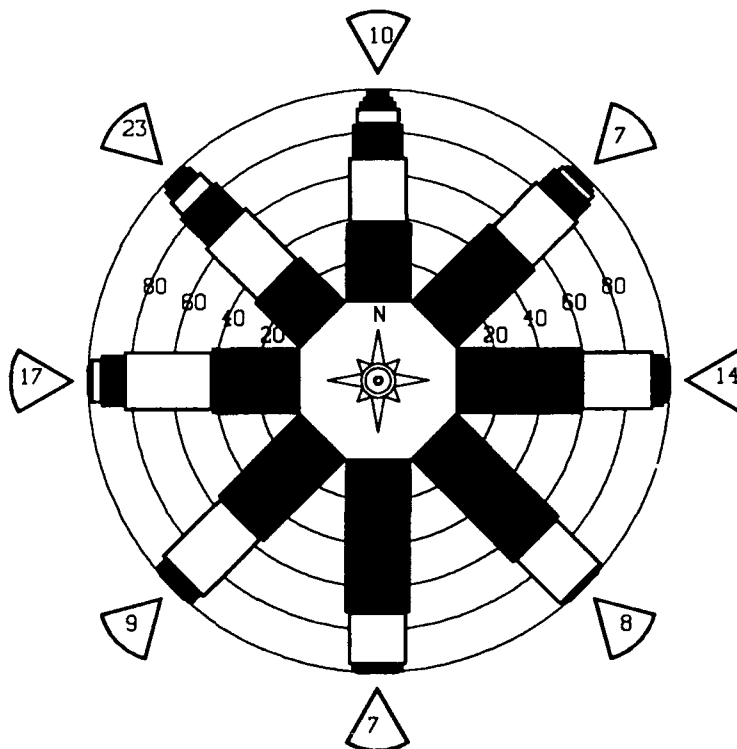
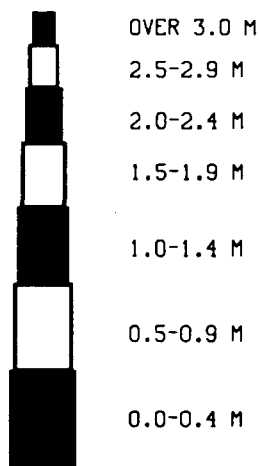
MEAN HS(M) = 1.0 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 6788.

STATION S25 46.65N 90.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1832	2040	698	140	24	5					4739
0.50-0.99		1887	1257	184	54	28					3412
1.00-1.49			747	201	46	23					1024
1.50-1.99			142	189	98	21					456
2.00-2.49			3	81	51	50					190
2.50-2.99				8	28	54					92
3.00-3.49					1	36					39
3.50-3.99						10					14
4.00-4.49											2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1832	3927	2847	803	302	227	22	7	1	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.

STATION 25
46.65N, 90.28 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S25 (46.65N 90.28W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.8	0.8	0.9	0.6	0.4	0.4	0.4	0.5	0.8	1.2	1.0	0.7
1957	1.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.6	1.1	0.0	0.7
1958	0.7	1.2	0.0	0.0	0.0	0.5	0.4	0.4	0.0	0.7	1.1	0.0	0.7
1959	0.9	0.7	0.0	0.0	0.0	0.4	0.4	0.3	0.0	0.7	1.0	0.0	0.6
1960	0.9	1.0	0.0	0.0	0.0	0.4	0.3	0.4	0.0	0.7	1.0	0.0	0.7
1961	0.8	0.7	0.0	0.0	0.0	0.4	0.3	0.3	0.0	0.6	0.7	0.0	0.6
1962	1.1	0.7	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.4	0.6	0.7	0.6
1963	0.9	1.0	0.0	0.0	0.0	0.3	0.3	0.4	0.0	0.5	0.9	1.0	0.6
1964	0.9	0.8	0.0	0.0	0.0	0.4	0.3	0.5	0.0	0.5	0.7	0.8	0.6
1965	1.0	0.9	0.0	0.0	0.0	0.4	0.4	0.3	0.0	0.5	0.9	1.1	0.7
1966	1.1	1.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.6	0.9	1.0	0.9
1967	1.1	1.0	0.0	0.0	0.0	0.4	0.5	0.5	0.0	0.5	1.0	0.9	0.8
1968	0.8	1.5	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.7	1.1	0.8
1969	1.0	0.7	0.0	0.0	0.0	0.4	0.3	0.4	0.0	0.5	0.7	0.8	0.6
1970	0.8	1.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.6	0.5	0.9	0.7
1971	1.0	1.0	0.0	0.0	0.0	0.3	0.4	0.3	0.0	0.3	0.6	0.7	0.6
1972	1.0	0.8	0.0	0.0	0.0	0.4	0.3	0.3	0.0	0.3	0.8	0.6	0.7
1973	0.8	0.7	0.0	0.0	0.0	0.3	0.4	0.2	0.0	0.5	0.6	0.9	0.8
1974	0.7	0.6	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.5	0.6	0.9	0.7
1975	0.9	0.7	1.0	0.5	0.3	0.4	0.4	0.4	0.0	0.5	0.7	1.0	0.7
1976	0.9	0.9	1.1	0.6	0.3	0.4	0.3	0.3	0.0	0.5	0.4	0.7	0.8
1977	0.9	1.0	1.0	0.5	0.4	0.3	0.3	0.3	0.0	0.5	0.6	0.7	0.8
1978	1.0	0.7	0.5	0.6	0.4	0.3	0.3	0.4	0.0	0.6	0.6	0.7	0.7
1979	0.8	0.6	0.0	0.5	0.4	0.4	0.3	0.4	0.0	0.5	0.6	0.8	0.8
1980	0.8	0.6	0.0	0.5	0.4	0.4	0.3	0.4	0.0	0.5	0.8	0.6	0.9
1981	0.8	0.8	0.0	0.6	0.4	0.4	0.3	0.3	0.0	0.6	0.7	0.7	0.6
1982	1.1	0.7	0.0	0.7	0.4	0.4	0.3	0.3	0.0	0.5	0.6	0.8	0.6
1983	0.8	0.7	0.0	0.6	0.5	0.3	0.3	0.3	0.0	0.5	0.6	0.9	0.6
1984	0.8	0.8	0.0	0.6	0.5	0.4	0.3	0.3	0.0	0.5	0.6	0.8	0.6
1985	1.1	0.0	0.0	0.6	0.4	0.4	0.3	0.3	0.0	0.4	0.6	0.7	0.7
1986	0.9	0.0	0.0	0.7	0.4	0.4	0.3	0.3	0.0	0.5	0.6	0.8	0.6
1987	0.7	0.0	0.8	0.4	0.4	0.3	0.3	0.3	0.4	0.7	0.8	0.7	0.5
MEAN	0.9	0.8	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S25 (46.65N 90.28W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.7	2.6	2.3	3.7	2.2	1.8	1.2	1.1	2.0	2.7	5.0	2.6	2.6
1957	2.5	2.0	2.4	2.7	2.4	1.6	1.8	1.1	2.5	2.8	5.5	2.5	2.5
1958	4.3	3.3	1.1	2.7	1.9	1.6	1.4	1.1	2.5	2.5	4.4	2.8	2.8
1959	3.1	2.2	0.0	2.1	2.1	1.1	1.2	1.1	2.2	2.2	3.3	2.2	2.2
1960	3.2	2.3	0.0	2.2	2.3	0.0	1.3	1.1	2.2	2.2	4.4	2.8	2.8
1961	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1962	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1963	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1964	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1965	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1966	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1967	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1968	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1969	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1970	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1971	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1972	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1973	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1974	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1975	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1976	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1977	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1978	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1979	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1980	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1981	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1982	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1983	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1984	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1985	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1986	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8
1987	3.3	2.2	0.0	2.2	2.2	0.0	1.7	1.1	2.2	2.2	4.4	2.8	2.8

32 YR. STATISTICS FOR WIS STATION S25

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	42.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75032421

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	524	896	313	48	4						1785
0.50-0.99	.	314	1100	88	48	14	.	.	.	.	1564
1.00-1.49	.	.	275	420	34	39	2	.	.	.	770
1.50-1.99	.	.	22	244	114	13	8	1	.	.	402
2.00-2.49	.	.	.	59	67	36	1	4	.	.	167
2.50-2.99	.	.	.	1	93	36	1	2	.	.	133
3.00-3.49	3	98	1	1	.	.	103
3.50-3.99	45	6	1	.	.	53
4.00-4.49	5	8	.	1	.	15
4.50-4.99	1	2	.	1	5
5.00-5.49	2	.	3
5.50-5.99	2	1	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	524	1210	1710	860	363	286	28	11	6	2	
MEAN HS(M) = 0.9	LARGEST HS(M) = 5.4		MEAN TP(SEC) = 4.3		NO. OF CASES = 4690.						

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	420	689	299	54	4						1466
0.50-0.99	.	239	772	114	43	14	.	.	.	.	1182
1.00-1.49	.	.	159	211	43	28	3	.	.	.	444
1.50-1.99	.	.	3	97	71	29	4	1	.	.	205
2.00-2.49	.	.	.	10	12	21	7	4	.	1	55
2.50-2.99	.	.	.	1	26	16	4	6	1	.	54
3.00-3.49	3	28	10	3	.	.	44
3.50-3.99	13	4	6	.	.	23
4.00-4.49	8	3	2	.	13
4.50-4.99	2	5	1	.	8
5.00-5.49	1	2	1	4
5.50-5.99	2	1	2
6.00-6.49	1	2	3
6.50-6.99	1	1
7.00+	0
TOTAL	420	928	1233	487	202	149	42	29	7	7	3296
MEAN HS (M) = 0.8	LARGEST HS (M) = 6.7		MEAN TP (SEC) = 4.2		NO. OF CASES = 3296.						

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	611	839	447	87	4	2	2	1	.	.	1991
0.50-0.99	.	301	747	142	39	12	2	.	.	.	1243
1.00-1.49	.	.	204	221	45	25	3	1	.	.	499
1.50-1.99	.	.	9	99	43	37	9	1	.	.	198
2.00-2.49	.	.	.	37	24	23	7	5	.	.	96
2.50-2.99	.	.	.	2	26	16	1	2	2	1	50
3.00-3.49	2	20	7	.	2	3	34
3.50-3.99	5	6	6	1	.	17
4.00-4.49	1	3	2	1	.	7
4.50-4.99	1	5	.	6
5.00-5.49	4	.	4
5.50-5.99	1	1	2
6.00-6.49	1	1
6.50-6.99	0
7.00+	0
TOTAL	611	1140	1407	588	183	141	38	19	15	6	
MEAN HS(M) = 0.7	LARGEST HS(M)=		6.0	MEAN TP(SEC)=		4.1	NO. OF CASES=		3896.		

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	752	1043	566	108	6	3		.	.	.	2478
0.50-0.99		624	564	177	47	19	2	.	.	.	1433
1.00-1.49	.	.	119	125	38	35	5	2	1	.	325
1.50-1.99	.	.	10	42	40	24	12	4	1	.	133
2.00-2.49	.	.	1	13	11	22	7	5	6	1	66
2.50-2.99	.	.	.	3	11	12	7	1	2	2	37
3.00-3.49	.	.	.	.	1	2	2	6	2	4	16
3.50-3.99	.	.	.	1	.	5	.	.	4	.	7
4.00-4.49	.	.	.	.	.	.	1	1	2	.	4
4.50-4.99	.	.	.	.	.	.	.	2	.	.	2
5.00-5.49	.	.	.	.	.	.	.	.	1	.	1
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	752	1667	1260	469	154	122	36	21	18	3	
MEAN HS(M) = 0.6	LARGEST HS(M)=		5.2	MEAN TP(SEC)=		3.8	NO. OF CASES=		4228.		

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1438	2075	960	156	17	2					4648
0.50-0.99		1963	410	465	109	45	7		1		3000
1.00-1.49			198	143	126	54	16	6	2		545
1.50-1.99			81	8	83	24	27	5	4		232
2.00-2.49			22		6	19	8	10	9	1	75
2.50-2.99			2	1		2	3			2	10
3.00-3.49									1	2	3
3.50-3.99									2		2
4.00-4.49										1	1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1438	4038	1673	773	341	146	61	21	19	6	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 7977.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1263	1366	501	95	8	5					3238
0.50-0.99		1414	143	139	68	25	2	2			1793
1.00-1.49			111	8	20	10	7	4	1	1	162
1.50-1.99			45	1	4	4	3	3			60
2.00-2.49			1	1							2
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1263	2780	801	245	100	44	12	9	1	1	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4924.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1115	1150	378	83	5	3	1				2735
0.50-0.99		983	159	38	31	20	1	2			1234
1.00-1.49			63		4	7	1	1			76
1.50-1.99			8					3			11
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1115	2133	608	121	40	30	3	6	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 3799.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1026	1033	276	42	17	1					2395
0.50-0.99		732	81	16	18	3		1			851
1.00-1.49			51			4					55
1.50-1.99			7								7
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1026	1765	415	58	35	8	0	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3098.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1147	1213	285	65	8	1	.	.	.	.	2719
0.50-0.99	.	667	47	9	14	2	.	.	.	.	739
1.00-1.49	.	.	95	.	.	.	.	1	.	.	98
1.50-1.99	.	.	2	.	.	.	.	.	.	.	2
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1147	1880	429	74	22	5	0	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3332.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	861	1463	221	49	6	.	.	.	1	.	2601
0.50-0.99	.	1017	279	10	11	5	.	.	.	.	1322
1.00-1.49	.	.	255	.	.	.	1	.	.	.	256
1.50-1.99	.	.	16	22	.	.	1	.	.	.	39
2.00-2.49	.	.	.	8	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	861	2480	771	89	17	5	2	0	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3957.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	883	1365	266	73	10	1	.	.	.	.	2598
0.50-0.99	.	701	942	9	14	6	.	.	.	.	1672
1.00-1.49	.	.	623	7	.	3	.	1	.	.	634
1.50-1.99	.	.	59	177	.	.	.	1	.	.	237
2.00-2.49	.	.	.	57	.	.	.	.	.	.	57
2.50-2.99	.	.	.	1	4	.	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	883	2066	1890	324	28	10	0	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4874.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1059	1407	235	71	4	.	.	.	.	.	2776
0.50-0.99	.	697	1279	23	16	.	.	.	.	.	2020
1.00-1.49	.	.	903	14	1	5	.	.	.	.	923
1.50-1.99	.	.	60	272	.	.	.	1	.	.	333
2.00-2.49	.	.	.	96	.	.	.	.	.	.	96
2.50-2.99	.	.	.	8	28	.	.	1	.	.	37
3.00-3.49	6	.	.	.	.	.	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1059	2104	2477	484	55	10	0	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 5798.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1544	2008	453	100	10	3	1	.	.	.	4119
0.50-0.99	.	1118	1788	72	28	12	.	.	.	.	3018
1.00-1.49	.	.	1358	5	2	2	.	.	.	.	1367
1.50-1.99	.	.	96	382	.	.	.	.	.	.	478
2.00-2.49	.	.	.	239	.	.	.	.	.	.	239
2.50-2.99	.	.	.	19	26	.	.	.	.	.	45
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	3	.	.	.	.	5
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1544	3126	3695	817	70	20	1	0	0	0	8680

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 8680.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1437	2418	542	69	4	1	1	.	.	.	4472
0.50-0.99	.	1316	2728	166	48	6	.	.	.	.	4264
1.00-1.49	.	.	1804	255	21	9	2	.	.	.	2091
1.50-1.99	.	.	260	636	86	4	.	.	.	.	986
2.00-2.49	.	.	.	423	47	9	.	.	.	.	479
2.50-2.99	.	.	.	49	133	17	.	.	.	.	199
3.00-3.49	13	51	1	.	.	.	65
3.50-3.99	22	1	.	.	.	23
4.00-4.49	1	2	.	.	.	3
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1437	3734	5334	1598	352	120	8	0	0	0	11777

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 11777.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	855	1802	634	87	18	1	.	.	.	.	3397
0.50-0.99	.	817	3167	229	41	10	.	.	.	.	4264
1.00-1.49	.	.	1096	1434	43	17	.	1	.	.	2591
1.50-1.99	.	.	64	1013	453	4	.	.	.	.	1534
2.00-2.49	.	.	.	274	392	32	1	.	.	.	699
2.50-2.99	.	.	.	5	466	178	.	.	1	.	650
3.00-3.49	18	467	.	.	.	.	485
3.50-3.99	144	3	.	.	.	147
4.00-4.49	6	9	.	.	.	15
4.50-4.99	0
5.00-5.49	3	2	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	855	2619	4961	3042	1431	859	16	3	1	0	12904

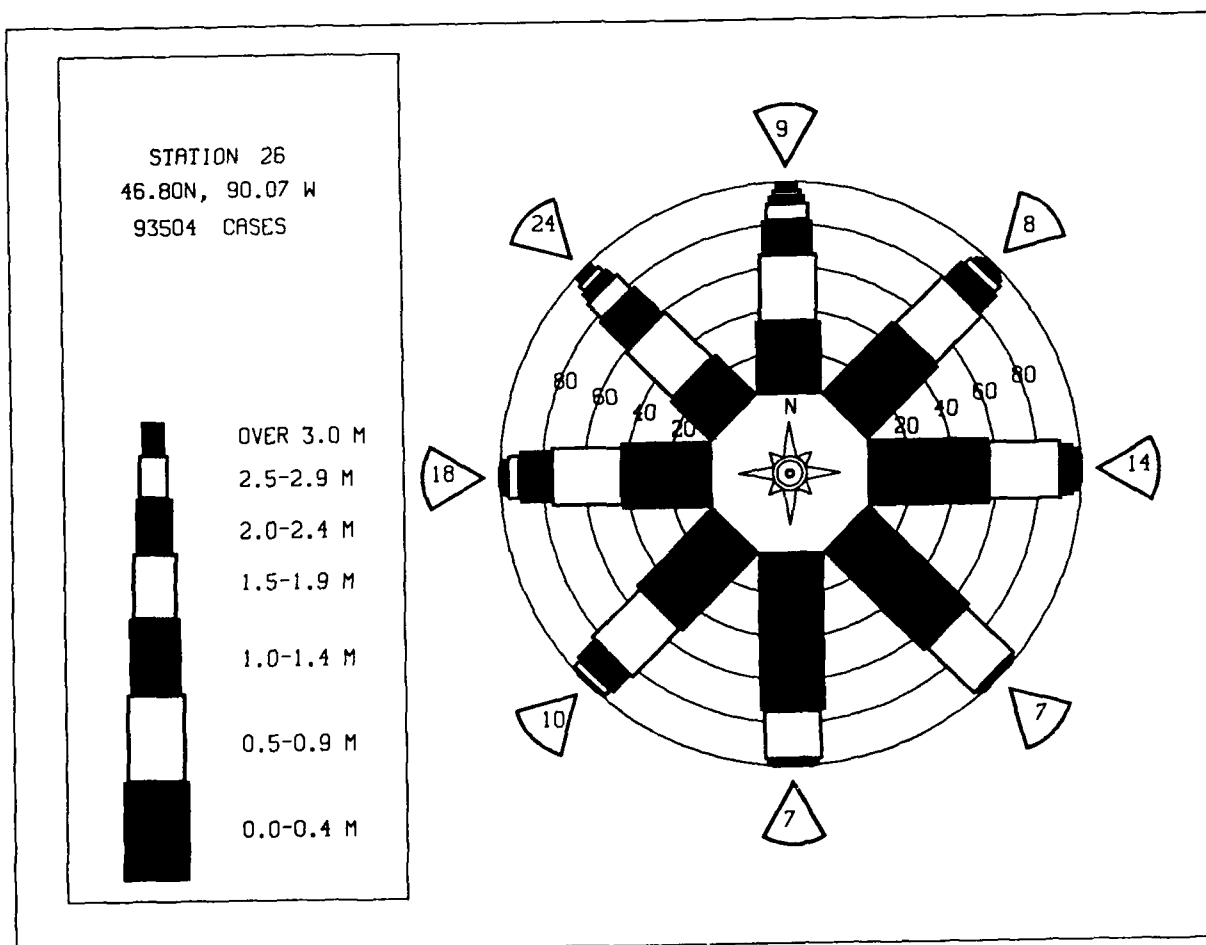
MEAN HS(M) = 1.1 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 12904.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	537	847	345	41	4	1	.	.	.	.	1775
0.50-0.99	.	392	1552	98	40	13	.	.	.	.	2095
1.00-1.49	.	.	394	760	21	21	.	.	.	.	1197
1.50-1.99	.	.	26	443	224	7	2	.	.	.	702
2.00-2.49	.	.	.	115	148	47	.	2	.	.	312
2.50-2.99	198	93	.	.	.	.	291
3.00-3.49	4	226	.	.	.	.	230
3.50-3.99	78	3	.	.	.	81
4.00-4.49	2	.	.	.	.	9
4.50-4.99	2	.	.	.	3
5.00-5.49	1	.	.	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	537	1239	2317	1457	639	488	15	3	0	0	6274

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 6274.

STATION S26 46.80N 90.07W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	1548	2162	672	123	13	2	1	.	.	4520
0.50-0.99	.	1330	1576	180	62	22	4	.	.	3171
1.00-1.49	.	.	771	360	40	26	6	1	.	1202
1.50-1.99	.	.	2	344	112	15	3	2	.	556
2.00-2.49	.	.	.	133	71	21	1	3	1	234
2.50-2.99	.	.	.	9	101	37	1	1	.	149
3.00-3.49	5	89	2	1	.	97
3.50-3.99	31	4	.	.	34
4.00-4.49	1	.	1	.	5
4.50-4.99	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1548	3492	3098	1149	404	244	23	10	1	0
TOTAL	1548	3492	3098	1149	404	244	23	10	1	0
MEAN HS(M)= 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S26 (46.80N 90.07W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.9	0.9	1.0	0.7	0.5	0.5	0.4	0.6	0.9	1.3	1.1	0.8
1957	1.2	1.0	0.7	0.7	0.7	0.0	0.4	0.5	0.6	0.9	1.1	1.1	0.8
1958	0.7	1.3	0.0	0.5	0.7	0.0	0.7	0.0	0.0	0.0	1.1	1.1	0.8
1959	1.0	0.8	0.0	0.7	0.6	0.0	0.4	0.4	0.0	0.0	1.1	1.1	0.8
1960	1.0	1.0	0.0	0.8	0.7	0.0	0.4	0.4	0.0	0.0	1.1	1.1	0.8
1961	0.9	0.8	1.0	0.0	0.6	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1962	1.2	0.8	0.0	0.7	0.5	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1963	1.1	1.1	0.0	0.6	0.5	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1964	1.1	0.9	1.0	0.0	0.7	0.0	0.6	0.0	0.0	0.0	1.1	1.1	0.8
1965	1.2	1.1	0.0	0.6	0.5	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1966	1.1	1.1	1.0	0.0	0.9	0.0	0.5	0.0	0.0	0.0	1.1	1.1	0.8
1967	1.3	1.2	0.0	0.8	0.7	0.0	0.5	0.0	0.0	0.0	1.1	1.1	0.8
1968	0.9	1.8	1.1	0.0	0.5	0.0	0.5	0.0	0.0	0.0	1.1	1.1	0.8
1969	0.7	1.0	0.0	0.6	0.6	0.0	0.5	0.0	0.0	0.0	1.1	1.1	0.8
1970	0.9	1.2	0.0	0.8	0.7	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1971	1.2	1.1	1.0	0.0	0.6	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1972	1.2	0.9	0.0	0.6	0.4	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1973	0.9	0.8	0.0	0.7	0.6	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1974	0.8	0.6	0.0	0.6	0.5	0.0	0.5	0.0	0.0	0.0	1.1	1.1	0.8
1975	1.1	0.9	1.1	0.6	0.4	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1976	1.0	1.0	1.2	0.6	0.6	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1977	1.1	1.2	1.1	0.5	0.4	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1978	1.1	0.8	0.0	0.7	0.4	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1979	0.9	0.6	0.0	0.5	0.4	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1980	0.9	0.7	0.0	0.6	0.5	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1981	0.9	0.9	0.0	0.6	0.4	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1982	1.3	0.9	1.0	0.8	0.5	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1983	0.9	0.7	1.1	0.6	0.5	0.0	0.4	0.0	0.0	0.0	1.1	1.1	0.8
1984	0.9	0.8	1.1	0.7	0.5	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1985	1.1	0.9	1.0	0.6	0.5	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1986	1.0	0.6	1.0	0.8	0.5	0.0	0.3	0.0	0.0	0.0	1.1	1.1	0.8
1987	0.8	0.8	0.9	0.5	0.4	0.3	0.3	0.4	0.4	0.8	0.9	0.8	0.6
MEAN	1.0	0.9	0.9	0.7	0.5	0.4	0.4	0.4	0.6	0.7	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S26 (46.80N 90.07W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.9	3.4	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1957	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1958	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1959	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1960	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1961	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1962	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1963	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1964	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1965	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1966	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1967	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1968	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1969	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1970	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1971	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1972	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1973	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1974	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1975	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1976	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1977	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1978	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1979	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1980	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1981	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1982	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1983	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1984	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1985	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1986	2.2	3.3	3.0	3.6	2.5	1.7	1.3	1.2	2.6	4.4	4.2	3.2
1987	2.8	4.6	3.1	2.2	2.7	1.2	1.1	1.9	2.1	3.6	3.1	3.3

32 YR. STATISTICS FOR WIS STATION S26

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	23.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		67010715

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	357	792	239	34	2	.	.	.	.	.	1424
0.50-0.99	.	271	1061	119	45	1	.	.	.	.	1497
1.00-1.49	.	.	280	388	40	33	.	.	.	.	741
1.50-1.99	.	.	25	252	114	28	5	.	.	.	424
2.00-2.49	.	.	.	68	88	26	2	1	.	.	185
2.50-2.99	.	.	.	2	89	48	1	3	.	.	143
3.00-3.49	8	122	1	2	.	.	133
3.50-3.99	37	4	.	.	.	41
4.00-4.49	4	20	1	1	.	26
4.50-4.99	1	1	1	.	3
5.00-5.49	1	1	.	.	2
5.50-5.99	2	3
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	357	1063	1605	863	386	299	35	9	3	2	
MEAN HS(M) = 1.0	LARGEST HS(M)=		5.7	MEAN TP(SEC)=		4.5	NO. OF CASES=		4337.		

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	317	589	190	22	1						1119
0.50-0.99	.	254	794	109	26	3	.	.	.	.	1186
1.00-1.49	.	.	164	228	42	21	.	.	.	.	455
1.50-1.99	.	.	5	113	83	27	2	.	.	.	230
2.00-2.49	.	.	.	20	27	33	3	.	.	.	86
2.50-2.99	27	14	3	.	.	.	46
3.00-3.49	2	34	3	2	1	.	48
3.50-3.99	14	10	7	.	.	31
4.00-4.49	1	2	7	1	.	14
4.50-4.99	2	7	1	.	6
5.00-5.49	4	2	2	8
5.50-5.99	2	.	2
6.00-6.49	1	2	3
6.50-6.99	1	1
7.00+	1	1
TOTAL	317	843	1153	492	208	147	33	27	10	6	
MEAN HS(M) = 0.9	LARGEST HS(M) = 7.4		MEAN TP(SEC) = 4.3		NO. OF CASES = 3043.						

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	434	869	305	49							1657
0.50-0.99	.	301	974	152	47	1	.	.	.	.	1475
1.00-1.49	.	.	243	340	39	17	1	.	.	.	640
1.50-1.99	.	.	11	139	81	40	3	.	.	.	274
2.00-2.49	.	.	.	28	37	42	5	.	.	.	116
2.50-2.99	.	.	.	2	53	33	9	.	.	.	104
3.00-3.49	5	27	7	.	1	1	43
3.50-3.99	14	6	2	1	1	30
4.00-4.49	6	4	3	1	14
4.50-4.99	1	5	2	.	7
5.00-5.49	3	1	.	6
5.50-5.99	2	.	2
6.00-6.49	1	1
6.50-6.99	1	1
7.00+	1	1
TOTAL	434	1170	1533	710	262	174	41	31	11	5	
MEAN HS(M) = 0.8	LARGEST HS(M) = 7.2		MEAN TP(SEC) = 4.3		NO. OF CASES = 4104.						

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	514	922	288	24	2	.	.	.	.	.	1750
0.50-0.99	.	505	1151	137	38	8	.	.	.	.	1839
1.00-1.49	.	.	536	162	33	17	2	.	.	.	750
1.50-1.99	.	.	47	149	42	23	7	4	.	.	272
2.00-2.49	.	.	.	91	16	17	13	2	.	.	139
2.50-2.99	.	.	.	17	36	19	3	3	1	.	79
3.00-3.49	.	.	.	1	14	19	2	3	.	1	40
3.50-3.99	3	14	4	2	.	.	26
4.00-4.49	1	8	3	3	2	14
4.50-4.99	2	3	7	.	14
5.00-5.49	2	3	4	.	9
5.50-5.99	3	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	514	1427	2022	581	184	119	44	20	21	3	
MEAN HS (M) = 0.8	LARGEST HS (M) = 5.9		MEAN TP (SEC) = 4.0		NO. OF CASES = 4634.						

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	976	1663	426	32	5	9	2	.	.	.	3102
0.50-0.99	.	1119	2058	129	48	9	2	.	.	.	3375
1.00-1.49	.	.	1254	43	26	34	2	1	.	.	1360
1.50-1.99	.	.	118	254	8	14	7	1	.	.	402
2.00-2.49	.	.	.	211	7	7	7	1	.	.	234
2.50-2.99	.	.	.	58	27	1	2	5	.	.	93
3.00-3.49	.	.	.	1	29	2	1	3	1	1	36
3.50-3.99	7	2	.	.	.	.	10
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	976	2782	3866	728	151	69	21	18	1	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 8070.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	883	1245	297	38	3	8	2	.	.	.	2466
0.50-0.99	.	1030	755	85	29	8	2	.	.	.	1919
1.00-1.49	.	.	436	8	10	13	3	1	.	.	471
1.50-1.99	.	.	42	59	1	4	3	1	.	.	110
2.00-2.49	.	.	.	49	.	.	.	1	.	.	50
2.50-2.99	.	.	.	6	11	.	.	1	.	.	18
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	883	2275	1540	245	56	27	8	4	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 4723.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	931	1247	324	44	3	1	.	.	.	.	2550
0.50-0.99	.	1076	249	62	24	6	1	1	.	.	1419
1.00-1.49	.	.	141	8	8	9	1	.	.	.	167
1.50-1.99	.	.	25	.	.	2	1	.	1	.	31
2.00-2.49	.	.	.	1	.	.	1	.	.	.	2
2.50-2.99	1	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	931	2323	739	117	35	18	4	2	1	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3906.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	912	1101	235	22	5	2	.	.	.	.	2277
0.50-0.99	.	714	116	21	22	1	.	.	.	.	874
1.00-1.49	.	.	56	2	2	4	.	.	.	.	64
1.50-1.99	.	.	8	.	.	.	.	.	.	.	8
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	912	1815	415	45	29	7	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 3019.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	914	1106	305	48	3	.	.	.	.	.	2376
0.50-0.99	.	639	91	27	9	1	.	.	.	.	767
1.00-1.49	.	.	97	1	2	7	.	1	.	.	108
1.50-1.99	.	.	5	1	.	.	1	.	.	.	7
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	914	1745	498	77	14	8	1	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3053.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	702	1292	274	33	4	.	.	.	.	.	2305
0.50-0.99	.	903	317	26	14	3	.	.	.	.	1263
1.00-1.49	.	.	227	16	2	2	1	.	.	.	248
1.50-1.99	.	.	22	21	.	.	.	1	.	.	44
2.00-2.49	.	.	.	16	1	.	.	.	.	.	17
2.50-2.99	1	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	702	2195	840	112	22	5	1	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3634.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	680	1316	306	60	5	1	1	.	.	.	2369
0.50-0.99	.	645	1151	33	12	7	.	.	.	.	1848
1.00-1.49	.	.	464	81	3	3	.	.	.	.	551
1.50-1.99	.	.	47	188	3	.	.	.	.	.	238
2.00-2.49	.	.	.	106	17	.	.	.	.	.	123
2.50-2.99	.	.	.	2	35	.	.	.	.	.	37
3.00-3.49	2	.	.	.	.	.	4
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	680	1961	1968	470	77	14	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4844.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	849	1485	284	52	3	.	.	.	.	.	2673
0.50-0.99	.	664	1384	50	18	4	.	.	.	.	2120
1.00-1.49	.	.	698	137	3	6	.	.	.	.	844
1.50-1.99	.	.	26	326	.	.	.	.	.	.	352
2.00-2.49	.	.	.	147	33	.	.	1	.	.	181
2.50-2.99	.	.	.	3	55	.	.	.	.	.	58
3.00-3.49	10	12	.	.	.	.	22
3.50-3.99	8	.	.	.	.	8
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	849	2149	2392	715	122	30	0	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 5861.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1290	2167	412	83	2	.	.	.	.	.	3954
0.50-0.99	.	983	2374	68	38	6	.	.	.	.	3469
1.00-1.49	.	.	1304	87	5	9	.	.	.	.	1405
1.50-1.99	.	.	68	527	1	.	.	.	.	.	596
2.00-2.49	.	.	.	332	35	.	.	.	.	.	367
2.50-2.99	.	.	.	3	134	.	.	1	.	.	138
3.00-3.49	31	1	.	.	.	.	32
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1290	3150	4158	1100	245	26	0	1	0	0	9333

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 9333.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1067	2573	549	59	3	1	.	.	.	.	4252
0.50-0.99	.	1142	3730	199	47	7	.	.	.	.	5125
1.00-1.49	.	.	1656	682	38	9	.	.	.	.	2385
1.50-1.99	.	.	128	1079	244	14	1	.	.	.	1466
2.00-2.49	.	.	.	580	165	45	.	.	.	.	790
2.50-2.99	.	.	.	51	374	58	.	.	.	.	483
3.00-3.49	90	178	3	.	.	.	271
3.50-3.99	6	78	5	.	.	.	89
4.00-4.49	6	11	.	.	.	17
4.50-4.99	1	5	.	.	.	6
5.00-5.49	0
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1067	3715	6063	2650	967	397	25	2	0	0	13935

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 13935.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	632	1651	522	55	4	.	.	.	.	.	2864
0.50-0.99	.	640	3164	150	50	7	.	.	.	.	4011
1.00-1.49	.	1	774	1368	26	18	.	.	.	.	2187
1.50-1.99	.	.	47	906	409	6	.	.	.	.	1368
2.00-2.49	.	.	.	243	364	33	.	.	.	.	640
2.50-2.99	.	.	.	3	397	172	.	.	.	.	572
3.00-3.49	5	479	.	.	.	.	484
3.50-3.99	146	2	.	.	.	148
4.00-4.49	17	24	.	.	.	41
4.50-4.99	3	.	.	.	3
5.00-5.49	4	.	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	632	2292	4507	2725	1255	878	29	4	0	0	11535

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 11535.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	351	707	241	32	1	.	.	.	.	.	1332
0.50-0.99	.	360	1394	101	31	3	.	.	.	.	1889
1.00-1.49	.	.	385	653	18	31	.	.	.	.	1087
1.50-1.99	.	.	21	390	189	13	1	1	.	.	615
2.00-2.49	.	.	.	110	168	39	.	.	.	.	319
2.50-2.99	.	.	.	3	186	82	.	.	.	.	271
3.00-3.49	4	217	.	.	.	.	221
3.50-3.99	84	.	.	.	.	89
4.00-4.49	4	10	.	.	.	14
4.50-4.99	1	3	.	.	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	351	1067	2041	1289	597	473	17	5	1	0	5473

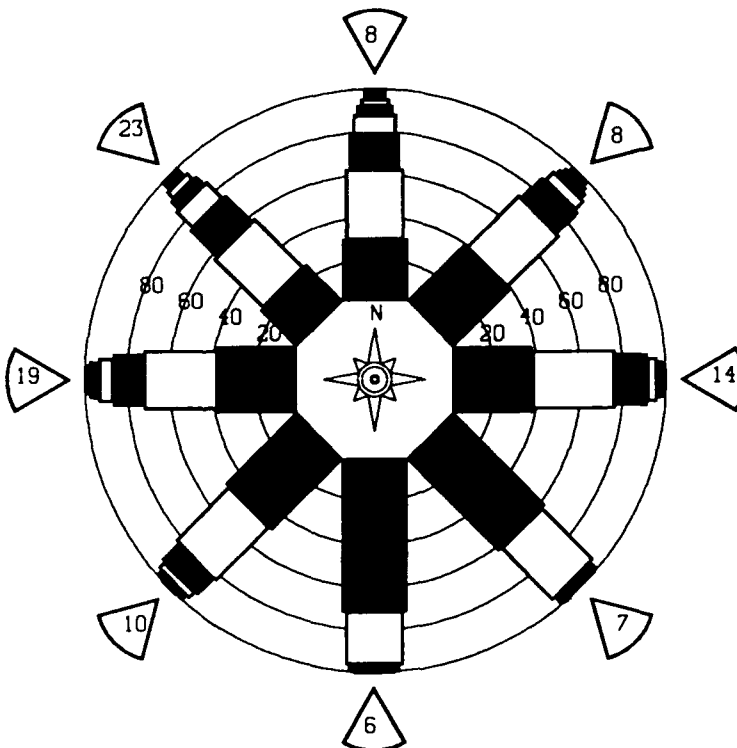
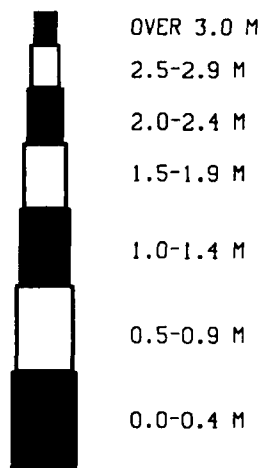
MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 5473.

STATION S27 46.95N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1181	2073	520	69	4	8	1	1	1	1	3847
0.50-0.99	.	1125	2079	147	50	23	1	1	1	1	3409
1.00-1.49	.	.	872	421	30	17	3	1	1	1	1347
1.50-1.99	.	.	65	441	117	24	3	1	1	1	643
2.00-2.49	.	.	.	200	95	42	1	2	1	1	323
2.50-2.99	.	.	.	15	143	109	2	1	1	1	203
3.00-3.49	20	40	4	1	1	1	132
3.50-3.99	1	4	8	1	1	1	46
4.00-4.49	1	1	1	1	13
4.50-4.99	1	1	1	3
5.00-5.49	1	1	1	1
5.50-5.99	1	1	0
6.00-6.49	1	0
6.50-6.99	0
7.00+	0
TOTAL	1181	3198	3536	1293	460	267	23	8	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 27
46.95N, 89.45 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S27 (46.95N 89.45W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.0	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.0	1.4	1.2	0.9
1957	1.3	1.2	0.9	0.8	0.8	0.6	0.5	0.5	0.7	0.7	1.2	1.1	0.9
1958	0.8	1.4	0.5	0.8	0.7	0.6	0.5	0.5	0.8	0.9	1.3	1.0	0.8
1959	1.0	0.9	0.8	0.8	0.8	0.5	0.4	0.4	0.7	0.9	1.2	1.2	0.8
1960	1.1	1.1	0.9	0.9	0.8	0.5	0.4	0.5	0.6	0.9	1.3	1.1	0.8
1961	0.9	0.9	1.1	0.8	0.7	0.6	0.4	0.4	0.6	0.8	0.9	1.0	0.7
1962	1.3	0.9	0.7	0.7	0.6	0.4	0.4	0.4	0.5	0.7	0.8	1.1	0.7
1963	1.1	1.2	1.0	0.7	0.6	0.4	0.4	0.5	0.5	0.6	1.1	1.2	0.8
1964	1.2	1.0	1.1	0.9	0.7	0.5	0.4	0.6	0.7	0.9	1.0	0.9	0.8
1965	1.3	1.2	0.9	0.7	0.5	0.5	0.4	0.4	0.6	1.1	1.4	1.3	0.9
1966	1.4	1.3	1.7	1.0	1.0	0.6	0.5	0.6	0.8	1.3	1.3	1.2	1.0
1967	1.4	1.3	1.1	0.9	0.8	0.6	0.6	0.6	0.7	1.3	1.2	1.4	1.0
1968	1.0	2.0	1.3	1.0	0.7	0.6	0.6	0.6	0.6	0.9	1.5	1.5	1.0
1969	1.3	0.8	1.1	0.8	0.6	0.5	0.4	0.5	0.6	0.9	1.0	0.9	0.8
1970	0.9	1.2	0.8	0.9	0.8	0.5	0.5	0.5	0.7	0.7	1.1	0.9	0.8
1971	1.2	1.2	1.0	0.9	0.7	0.4	0.5	0.4	0.4	0.8	0.9	0.8	0.8
1972	1.3	1.0	1.0	0.6	0.4	0.5	0.3	0.3	0.6	1.0	0.7	0.9	0.7
1973	1.0	1.0	1.0	0.8	0.8	0.5	0.4	0.3	0.7	0.8	1.1	1.0	0.8
1974	0.9	0.7	0.9	0.7	0.7	0.5	0.5	0.5	0.6	0.8	1.1	0.9	0.7
1975	1.1	1.0	1.2	0.7	0.4	0.4	0.4	0.5	0.6	0.8	1.1	0.8	0.7
1976	1.1	1.1	1.3	0.7	0.6	0.5	0.3	0.4	0.6	0.5	0.9	1.0	0.8
1977	1.2	1.3	1.3	0.6	0.5	0.4	0.4	0.4	0.6	0.8	0.9	1.1	0.8
1978	1.2	0.9	0.8	0.9	0.5	0.4	0.4	0.5	0.8	0.7	1.0	1.0	0.7
1979	1.0	0.7	1.0	0.7	0.5	0.5	0.3	0.5	0.6	0.7	1.0	1.0	0.7
1980	1.0	0.8	0.9	0.7	0.6	0.5	0.3	0.5	0.7	1.0	0.8	1.1	0.7
1981	1.0	1.0	1.0	0.7	0.4	0.5	0.3	0.4	0.8	0.8	0.9	0.8	0.7
1982	1.4	1.0	1.2	0.9	0.6	0.5	0.4	0.4	0.6	0.8	1.0	1.1	0.8
1983	1.0	0.8	1.3	0.7	0.6	0.4	0.4	0.3	0.6	0.7	1.2	1.2	0.8
1984	1.0	0.9	1.1	0.9	0.6	0.5	0.4	0.4	0.6	0.8	1.1	1.2	0.8
1985	1.3	1.0	1.2	0.8	0.6	0.6	0.3	0.4	0.5	0.7	0.9	1.2	0.8
1986	1.1	0.7	1.1	0.9	0.5	0.5	0.4	0.4	0.7	0.7	1.0	0.9	0.7
1987	0.9	0.9	1.1	0.6	0.5	0.4	0.4	0.5	0.5	0.9	1.0	0.9	0.7
MEAN	1.1	1.0	1.0	0.8	0.6	0.5	0.4	0.5	0.6	0.8	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S27 (46.95N 89.45W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.9	3.4	4.0	3.8	2.1	1.9	1.4	1.4	2.8	4.4	4.9	3.3	
1957	3.4	3.5	3.1	2.9	2.6	2.2	2.3	1.8	3.2	2.7	4.7	3.7	
1958	3.8	3.6	2.6	3.1	2.9	1.8	1.8	2.3	3.3	3.2	4.1	4.1	
1959	3.3	3.1	5.8	3.3	2.7	1.7	1.5	1.7	3.0	3.5	3.9	4.2	
1960	3.6	3.8	4.0	3.6	3.5	1.6	1.7	2.3	2.8	3.5	3.9	3.6	
1961	3.7	3.0	3.9	3.3	2.1	1.7	2.6	1.9	2.8	3.1	3.7	3.7	
1962	3.9	3.3	3.3	3.3	2.3	1.3	2.3	1.6	2.4	3.3	3.7	3.7	
1963	3.3	3.3	3.9	3.5	1.9	1.5	1.6	1.1	2.4	3.3	3.7	3.8	
1964	4.0	3.1	3.7	3.3	2.4	1.9	1.5	2.3	3.5	3.1	3.4	3.9	
1965	4.3	3.9	3.7	3.3	2.1	1.8	1.4	1.9	2.4	4.4	5.0	3.9	
1966	5.7	3.9	3.5	3.3	2.2	3.1	1.9	2.6	3.1	3.3	3.4	3.8	
1967	7.4	4.2	3.3	3.4	3.4	2.1	3.9	2.6	3.3	3.7	3.8	3.8	
1968	3.9	5.4	3.2	3.4	3.1	2.3	3.1	2.6	2.2	4.4	4.9	5.0	
1969	3.5	4.0	3.5	3.5	1.8	2.2	1.8	2.6	2.2	3.8	3.5	4.1	
1970	3.4	4.1	3.2	3.3	1.1	1.5	1.8	2.0	3.4	3.4	3.9	4.4	
1971	3.2	4.1	3.3	3.3	2.3	1.2	1.7	1.4	3.3	3.4	3.3	3.3	
1972	4.3	3.9	3.3	3.6	1.7	2.1	1.4	1.1	2.2	4.4	3.3	4.4	
1973	3.2	2.8	3.3	3.3	3.1	1.3	1.1	1.1	2.2	3.3	3.1	3.3	
1974	3.1	3.3	3.3	3.3	0.0	1.6	1.1	1.7	3.3	3.3	3.3	3.3	
1975	3.5	4.1	3.3	3.3	1.1	1.2	2.1	2.1	3.3	3.3	3.3	3.4	
1976	3.4	4.0	3.5	3.5	2.1	1.7	1.0	1.7	3.3	3.3	3.3	3.3	
1977	3.4	4.0	3.5	3.5	1.7	1.3	2.5	1.7	3.3	3.3	3.3	3.4	
1978	4.1	3.3	3.3	3.3	1.8	1.4	1.3	1.3	3.3	3.3	3.3	3.3	
1979	2.9	3.3	3.3	3.3	1.8	1.7	1.7	1.7	3.3	3.3	3.3	3.3	
1980	4.1	3.3	3.8	3.3	1.5	1.6	1.0	1.9	3.3	3.3	3.4	3.4	
1981	2.9	3.1	3.3	3.3	1.3	2.8	1.0	1.1	3.3	3.3	3.3	3.3	
1982	4.1	2.7	4.4	3.3	1.7	2.4	2.1	1.7	3.3	3.3	3.7	3.3	
1983	3.3	3.3	3.3	3.3	1.8	1.1	1.1	1.1	3.3	3.3	3.3	3.3	
1984	3.3	3.3	3.3	3.3	3.0	2.2	2.0	1.1	3.3	3.3	3.3	3.3	
1985	3.3	3.3	3.3	3.3	2.1	1.4	1.1	1.1	3.3	3.3	3.3	3.3	
1986	3.3	3.3	3.3	3.3	3.3	1.4	1.1	1.1	3.3	3.3	3.3	3.3	
1987	2.9	4.6	3.7	2.3	2.2	1.3	1.3	2.2	2.1	3.3	3.3	3.4	

32 YR. STATISTICS FOR WIS STATION S27

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	32.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		67010715

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	347	735	258	28	3	.	.	.	.	.	1371
0.50-0.99	.	316	1112	116	38	.	.	.	.	.	1582
1.00-1.49	.	.	318	398	34	26	.	.	.	.	776
1.50-1.99	.	.	24	271	111	19	3	.	.	.	428
2.00-2.49	.	.	.	80	82	32	2	1	.	.	197
2.50-2.99	.	.	.	1	121	35	2	2	.	.	161
3.00-3.49	9	108	.	1	.	.	118
3.50-3.99	55	4	1	.	.	60
4.00-4.49	8	20	1	.	.	29
4.50-4.99	4	.	2	.	6
5.00-5.49	1	.	.	1
5.50-5.99	1	2	3
6.00-6.49	0
6.50-6.99	0
7.00+	347	1051	1712	894	398	283	35	7	3	2	0
TOTAL	347	1051	1712	894	398	283	35	7	3	2	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4439.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	264	545	186	23	1	.	.	.	.	.	1019
0.50-0.99	.	299	759	91	28	1	.	.	.	.	1178
1.00-1.49	.	.	173	240	38	13	.	.	.	.	465
1.50-1.99	.	.	9	113	78	25	.	.	.	.	228
2.00-2.49	.	.	.	23	28	19	3	.	.	.	73
2.50-2.99	36	18	2	2	.	.	58
3.00-3.49	1	33	7	7	.	.	48
3.50-3.99	7	5	10	.	.	22
4.00-4.49	2	7	5	2	.	16
4.50-4.99	1	4	1	.	6
5.00-5.49	2	6	1	9
5.50-5.99	2	.	2
6.00-6.49	1	3	4
6.50-6.99	1	1	2
7.00+	264	844	1127	490	211	119	27	30	13	6	1
TOTAL	264	844	1127	490	211	119	27	30	13	6	1

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 2943.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	447	854	309	35	2	.	.	.	.	.	1647
0.50-0.99	.	378	1027	179	39	2	.	.	.	.	1825
1.00-1.49	.	.	254	329	41	18	1	.	.	.	643
1.50-1.99	.	.	18	167	82	43	4	.	.	.	314
2.00-2.49	.	.	.	37	37	44	7	3	.	.	128
2.50-2.99	.	.	.	1	48	36	10	4	1	.	100
3.00-3.49	5	33	6	4	1	.	49
3.50-3.99	12	14	4	1	.	31
4.00-4.49	6	7	1	.	17
4.50-4.99	1	7	1	.	9
5.00-5.49	2	.	.	2
5.50-5.99	4	.	4
6.00-6.49	1	1	1
6.50-6.99	1	0
7.00+	447	1232	1608	748	254	188	49	31	13	1	0
TOTAL	447	1232	1608	748	254	188	49	31	13	1	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4291.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	547	874	328	36	2	.	.	.	.	.	1787
0.50-0.99	.	826	1012	159	42	6	.	.	.	.	2025
1.00-1.49	.	.	342	152	31	11	2	.	.	.	538
1.50-1.99	.	.	72	87	29	21	11	5	.	.	219
2.00-2.49	.	.	.	57	28	12	12	4	.	.	113
2.50-2.99	.	.	.	13	28	12	2	5	1	1	62
3.00-3.49	.	.	.	2	1	11	2	4	1	1	23
3.50-3.99	1	9	3	2	1	1	17
4.00-4.49	4	3	2	2	.	12
4.50-4.99	2	3	8	.	13
5.00-5.49	2	4	.	6
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	547	1700	1754	480	164	86	37	27	18	3	0
TOTAL	547	1700	1754	480	164	86	37	27	18	3	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4524.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1090	1396	460	49	3	20	2	.	.	.	2998
0.50-0.99	.	1882	1707	130	55	2	2	.	.	.	3796
1.00-1.49	.	.	786	52	34	42	7	.	.	.	921
1.50-1.99	.	.	223	85	8	31	6	7	.	.	360
2.00-2.49	.	.	.	129	8	7	10	5	2	1	159
2.50-2.99	.	.	.	38	2	3	5	2	.	1	51
3.00-3.49	.	.	.	5	.	.	.	.	.	.	12
3.50-3.99	2
4.00-4.49	1	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1090	3278	3176	488	114	103	30	16	2	3	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 7775.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	957	1104	319	37	3	1	.	.	.	.	2421
0.50-0.99	.	1348	727	58	47	7	3	.	.	.	2190
1.00-1.49	.	.	360	7	5	17	3	.	.	.	392
1.50-1.99	.	.	88	53	.	2	5	2	.	.	150
2.00-2.49	.	.	.	35	.	.	2	2	.	.	39
2.50-2.99	.	.	.	6	.	.	.	.	.	.	6
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	957	2452	1494	196	58	27	13	4	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 4872.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	926	1211	316	52	4	2	.	.	.	.	2511
0.50-0.99	.	1121	242	65	28	8	.	1	.	.	1465
1.00-1.49	.	.	152	6	1	5	.	1	.	.	165
1.50-1.99	.	.	32	.	.	1	2	.	.	.	35
2.00-2.49	1	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	926	2332	742	123	33	16	2	3	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3913.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	929	1064	237	23	3	1	.	.	.	.	2257
0.50-0.99	.	835	110	19	16	2	.	.	.	.	982
1.00-1.49	.	.	101	1	1	3	.	.	.	.	106
1.50-1.99	.	.	13	.	.	1	.	.	.	.	14
2.00-2.49	1	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	929	1899	461	43	20	7	0	1	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 3146.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =160.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	958	1075	271	40	4	.	.	.	.	.	2348
0.50-0.99	.	792	77	22	16	2	.	.	.	.	909
1.00-1.49	.	.	134	1	2	1	1	.	.	.	139
1.50-1.99	.	.	8	.	.	1	1	.	.	.	10
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	958	1867	490	63	22	4	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3190.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	742	1076	222	40	2	.	1	.	.	.	2083
0.50-0.99	.	881	95	17	10	2	.	.	.	.	1005
1.00-1.49	.	.	166	1	1	2	.	.	.	.	169
1.50-1.99	.	.	22	1	.	.	.	1	.	.	24
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	742	1957	505	59	13	4	1	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3074.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	668	1236	330	52	4	1	.	.	.	.	2291
0.50-0.99	.	1098	561	40	17	8	.	.	.	.	1724
1.00-1.49	.	.	192	111	3	6	.	.	.	.	312
1.50-1.99	.	.	56	71	9	4	.	.	.	.	140
2.00-2.49	.	.	1	6	23	.	.	1	.	.	31
2.50-2.99	1	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	668	2334	1140	280	57	19	0	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4215.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	763	1460	297	40	3	.	.	.	.	.	2563
0.50-0.99	.	973	1266	44	17	2	.	.	.	.	2302
1.00-1.49	.	.	607	269	2	3	.	.	.	.	881
1.50-1.99	.	.	33	311	4	.	.	.	.	.	348
2.00-2.49	.	.	.	72	69	.	.	.	.	.	141
2.50-2.99	24	7	.	.	.	.	31
3.00-3.49	5	13	.	.	.	.	18
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	763	2433	2203	736	125	25	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 5886.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1150	2222	439	59	2						3872
0.50-0.99		1130	2700	78	28	1					3937
1.00-1.49			1197	455	6	6					1664
1.50-1.99			73	747	9						829
2.00-2.49				309	84	1					404
2.50-2.99				3	191			1			195
3.00-3.49					38						78
3.50-3.99						40					14
4.00-4.49						3					3
4.50-4.99							2				2
5.00-5.49							1				1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1150	3352	4409	1651	368	65	3	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 10296.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	984	2562	577	60		1					4184
0.50-0.99		1127	3976	206	36	6					5351
1.00-1.49		1	1176	1162	45	8					2392
1.50-1.99			83	1189	306	27					1505
2.00-2.49				501	304	71					876
2.50-2.99				6	537	97					640
3.00-3.49					83	280	2				365
3.50-3.99						148	16				164
4.00-4.49						10	33	3			46
4.50-4.99							10	2			12
5.00-5.49							1	1			2
5.50-5.99							1	1			2
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	984	3690	5812	3124	1311	648	63	7	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 14640.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	617	1573	484	51	2						2727
0.50-0.99		629	2958	149	39	5					3780
1.00-1.49			690	1376	29	18					2113
1.50-1.99			41	774	473	8					1296
2.00-2.49				234	348	96					678
2.50-2.99				1	355	188					544
3.00-3.49					6	462					468
3.50-3.99						171	2				173
4.00-4.49						8	29				37
4.50-4.99							8				8
5.00-5.49								2			2
5.50-5.99								2			2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	617	2202	4173	2585	1252	956	39	4	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 11072.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	303	642	212	23							1180
0.50-0.99		340	1325	91	23	3					1782
1.00-1.49			373	635	20	20					1048
1.50-1.99			20	403	213	7	1				644
2.00-2.49				108	148	58	1	1			316
2.50-2.99				1	182	79					262
3.00-3.49					12	211			1		224
3.50-3.99						88	3				91
4.00-4.49						6	17				23
4.50-4.99							4	2			6
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	303	982	1930	1261	598	472	26	4	1	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 5228.

STATION S28 46.95N 89.63W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

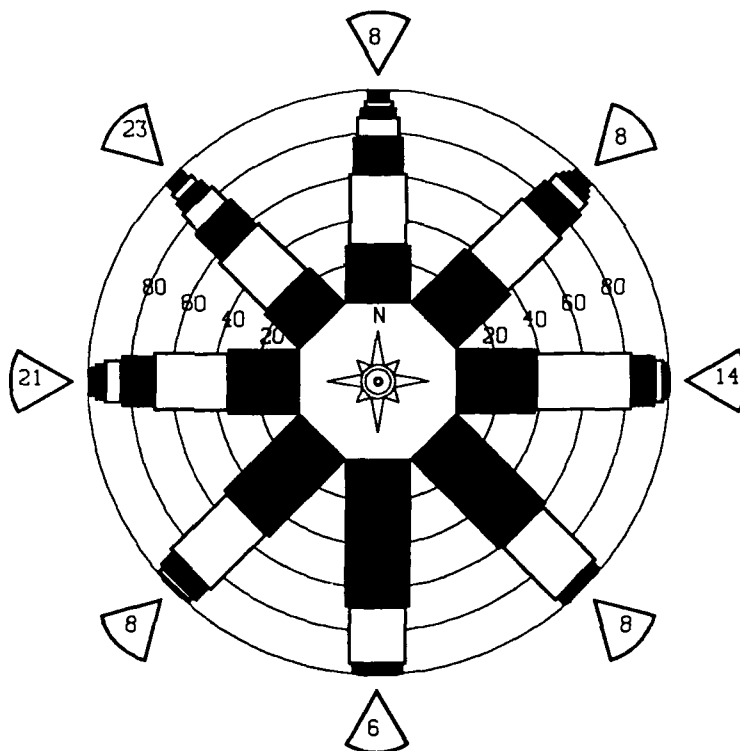
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1169	1963	525	65	4	7	.	.	.	.	3726
0.50-0.99	.	1398	1966	145	48	20	.	.	.	.	3564
1.00-1.49	.	.	702	520	29	19	1	1	.	.	1272
1.50-1.99	.	.	82	427	132	19	3	1	.	.	664
2.00-2.49	.	.	.	159	117	34	3	2	.	.	315
2.50-2.99	.	.	.	7	152	47	2	1	.	.	209
3.00-3.49	17	119	1	1	.	.	138
3.50-3.99	50	4	1	.	.	55
4.00-4.49	11	1	.	.	16
4.50-4.99	3	1	1	.	5
5.00-5.49	1	1	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1169	3361	3275	1323	499	300	28	9	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.

STATION 28
46.95N, 89.63 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S28 (46.95N 89.63W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.0	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.0	1.4	1.2	0.9
1957	1.4	1.2	0.9	0.9	0.8	0.6	0.5	0.6	0.7	0.7	1.1	1.1	0.9
1958	0.8	1.4	0.5	0.9	0.8	0.6	0.5	0.5	0.8	0.9	1.3	1.0	0.8
1959	1.0	0.9	0.8	0.8	0.8	0.5	0.4	0.5	0.7	0.8	1.3	1.2	0.8
1960	1.1	1.2	0.9	0.9	0.8	0.5	0.4	0.5	0.7	0.9	1.3	1.1	0.9
1961	0.9	0.9	1.1	0.8	0.7	0.6	0.4	0.4	0.7	0.8	0.9	1.1	0.8
1962	1.4	0.9	0.7	0.7	0.7	0.4	0.4	0.4	0.5	0.7	0.7	1.1	0.7
1963	1.1	1.2	1.0	0.7	0.6	0.4	0.4	0.5	0.5	0.7	1.1	1.1	0.8
1964	1.2	1.0	1.2	0.9	0.7	0.5	0.5	0.7	0.7	0.9	1.1	0.9	0.8
1965	1.3	1.3	0.9	0.7	0.5	0.5	0.5	0.4	0.6	1.1	1.4	1.3	0.9
1966	1.4	1.3	1.7	1.0	1.0	0.6	0.5	0.6	0.8	1.3	1.4	1.1	1.1
1967	1.4	1.4	1.1	0.9	0.9	0.5	0.6	0.6	0.7	1.4	1.3	1.1	1.0
1968	1.1	2.1	1.3	1.0	0.7	0.6	0.6	0.6	0.6	1.0	1.6	1.1	1.1
1969	1.3	0.8	1.1	0.7	0.6	0.5	0.4	0.5	0.6	0.9	1.1	0.9	0.8
1970	1.0	1.2	0.8	0.9	0.8	0.5	0.5	0.5	0.7	0.7	1.1	0.9	0.8
1971	1.2	1.2	1.0	0.9	0.7	0.4	0.5	0.5	0.5	0.8	0.9	0.9	0.8
1972	1.3	1.0	1.0	0.6	0.4	0.5	0.3	0.3	0.6	1.0	0.7	1.1	0.7
1973	1.1	1.0	1.0	0.8	0.8	0.5	0.5	0.4	0.7	0.8	1.1	1.2	0.8
1974	0.9	0.7	0.9	0.7	0.7	0.6	0.5	0.5	0.7	0.8	1.1	1.1	0.8
1975	1.1	1.0	1.2	0.6	0.4	0.4	0.4	0.5	0.6	0.8	1.1	0.8	0.7
1976	1.1	1.1	1.3	0.7	0.6	0.5	0.3	0.5	0.6	0.5	0.9	0.0	0.8
1977	1.3	1.4	1.3	0.6	0.5	0.4	0.4	0.4	0.6	0.8	0.9	1.1	0.8
1978	1.2	0.9	0.8	0.9	0.5	0.4	0.4	0.5	0.6	0.7	1.1	0.0	0.8
1979	1.0	0.8	1.0	0.7	0.5	0.5	0.4	0.5	0.6	0.7	1.1	0.0	0.7
1980	1.0	0.8	0.9	0.7	0.5	0.5	0.4	0.5	0.8	1.1	0.9	1.1	0.8
1981	1.0	1.0	1.0	0.7	0.5	0.5	0.3	0.4	0.8	0.8	0.9	0.8	0.7
1982	1.5	1.1	1.2	0.9	0.5	0.5	0.4	0.4	0.6	0.8	1.1	1.1	0.9
1983	1.0	1.1	1.1	0.7	0.5	0.4	0.4	0.4	0.6	0.7	1.1	1.2	0.8
1984	1.0	0.9	1.1	0.9	0.6	0.5	0.5	0.4	0.6	0.8	1.1	1.1	0.8
1985	1.4	1.1	1.2	0.8	0.6	0.5	0.4	0.4	0.6	0.7	0.9	2.2	0.8
1986	1.1	0.7	1.1	0.9	0.5	0.5	0.4	0.4	0.6	0.7	1.0	0.9	0.7
1987	0.9	0.9	1.0	0.6	0.5	0.4	0.4	0.5	0.5	0.9	1.0	0.9	0.7
MEAN	1.1	1.1	1.1	0.8	0.6	0.5	0.4	0.5	0.6	0.8	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S28 (46.95N 89.63W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.8	3.3	3.3	3.6	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1957	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1958	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1959	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1960	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1961	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1962	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1963	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1964	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1965	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1966	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1967	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1968	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1969	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1970	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1971	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1972	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1973	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1974	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1975	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1976	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1977	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1978	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1979	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1980	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1981	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1982	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1983	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1984	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1985	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1986	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	
1987	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.4	1.5	2.2	4.4	3.5	

32 YR. STATISTICS FOR WIS STATION S28

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	30.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67010715

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	350	721	255	34	1	.	.	.	.	.	1361
0.50-0.99	.	336	1230	112	32	1	.	.	.	.	1711
1.00-1.49	.	.	350	436	26	18	1	.	.	.	831
1.50-1.99	.	.	24	256	168	10	1	.	.	.	459
2.00-2.49	.	.	.	68	79	50	.	1	.	.	198
2.50-2.99	.	.	.	1	106	55	1	.	.	.	163
3.00-3.49	9	101	.	.	.	.	110
3.50-3.99	65	7	.	.	.	72
4.00-4.49	4	24	4	.	.	32
4.50-4.99	17	5	2	.	24
5.00-5.49	1	.	2	3
5.50-5.99	2	1	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	350	1057	1859	907	421	304	51	11	4	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 4660.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	250	525	180	24	2	.	.	.	.	.	981
0.50-0.99	.	357	748	87	20	2	.	.	.	.	1214
1.00-1.49	.	.	191	243	32	14	1	.	.	.	481
1.50-1.99	.	.	12	121	74	13	2	.	.	.	222
2.00-2.49	.	.	.	26	31	24	4	1	.	.	86
2.50-2.99	35	19	3	2	.	.	59
3.00-3.49	2	31	8	9	.	.	50
3.50-3.99	17	6	5	.	.	28
4.00-4.49	6	7	3	.	16
4.50-4.99	1	2	3	.	6
5.00-5.49	1	3	1	.	5
5.50-5.99	3	3	1	5
6.00-6.49	1	1	2	3
6.50-6.99	1	3	4
7.00+	0
TOTAL	250	882	1131	501	196	120	32	30	12	6	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 2971.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	457	869	368	39	4	.	.	.	.	.	1737
0.50-0.99	.	412	958	191	29	4	.	.	.	.	1594
1.00-1.49	.	.	262	288	50	13	2	.	.	.	615
1.50-1.99	.	.	23	145	60	37	4	3	.	.	272
2.00-2.49	.	.	1	50	29	22	8	3	1	.	114
2.50-2.99	.	.	.	3	40	42	6	4	1	.	96
3.00-3.49	5	22	9	2	.	.	38
3.50-3.99	11	12	3	2	.	28
4.00-4.49	1	4	9	4	.	18
4.50-4.99	1	5	4	.	10
5.00-5.49	2	2	.	4
5.50-5.99	1	.	1
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	0
TOTAL	457	1281	1612	716	217	152	46	31	17	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 4255.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	730	1120	468	58	8	.	.	.	.	.	2384
0.50-0.99	.	900	633	165	37	10	.	.	.	.	1745
1.00-1.49	.	.	164	134	33	31	11	4	.	.	377
1.50-1.99	.	.	40	42	37	11	13	5	2	.	150
2.00-2.49	.	.	5	17	13	13	7	5	.	1	61
2.50-2.99	.	.	.	1	8	8	1	4	4	2	28
3.00-3.49	.	.	.	1	1	4	3	3	1	.	13
3.50-3.99	2	1	2	3	.	8
4.00-4.49	2	3	1	.	6
4.50-4.99	3	2	2	6
5.00-5.49	1	1	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	730	2020	1310	418	137	79	38	29	15	5	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4489.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1361	2063	712	106	10	2	.	.	.	.	4254
0.50-0.99	.	2168	394	218	65	43	4	.	.	.	2892
1.00-1.49	.	.	336	62	34	70	16	7	.	.	524
1.50-1.99	.	.	142	5	13	25	27	10	3	.	225
2.00-2.49	.	.	31	1	.	6	6	5	1	2	52
2.50-2.99	.	.	.	8	.	.	1	1	.	1	11
3.00-3.49	2	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1361	4231	1615	400	122	146	54	23	4	5	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 7457.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1023	1291	361	70	8	4	1	.	.	.	2758
0.50-0.99	.	1454	233	83	41	10	2	.	.	.	1823
1.00-1.49	.	.	221	8	5	21	5	2	.	.	262
1.50-1.99	.	.	74	3	.	4	1	4	.	.	86
2.00-2.49	.	.	4	1	.	.	.	.	.	.	5
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1023	2745	893	166	54	39	9	6	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4624.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	907	1119	297	52	7	1	.	.	.	.	2383
0.50-0.99	.	1112	225	36	20	6	1	1	.	.	1401
1.00-1.49	.	.	135	3	.	5	1	1	.	.	145
1.50-1.99	.	.	32	1	.	.	1	1	.	.	35
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	907	2231	689	92	27	12	3	3	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 3713.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	856	1099	221	31	1	.	.	.	.	.	2208
0.50-0.99	.	962	150	18	8	3	.	.	.	.	1141
1.00-1.49	.	.	133	2	1	3	.	.	.	.	139
1.50-1.99	.	.	17	.	1	.	.	1	.	.	19
2.00-2.49	.	.	.	1	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	856	2061	521	52	11	6	0	2	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3286.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	974	1145	250	35	5	2	1	.	.	.	2409
0.50-0.99	.	952	89	18	12	.	.	.	.	.	1074
1.00-1.49	.	.	188	.	3	.	.	.	.	.	191
1.50-1.99	.	.	11	.	.	1	.	.	.	.	12
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	974	2097	538	53	20	3	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3452.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	745	1045	201	31	1	2	.	.	.	.	2023
0.50-0.99	.	949	111	9	10	2	.	.	.	.	1081
1.00-1.49	.	.	197	.	.	1	.	1	.	.	199
1.50-1.99	.	.	36	1	1	1	.	.	.	.	39
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	745	1994	545	42	12	4	0	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3131.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	650	1121	269	39	2	3	.	.	.	.	2084
0.50-0.99	.	1183	333	39	12	7	.	.	.	.	1574
1.00-1.49	.	.	201	29	7	6	.	.	.	.	243
1.50-1.99	.	.	98	4	1	.	.	1	.	.	113
2.00-2.49	.	.	3	5	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	650	2304	904	121	25	17	0	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 3770.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	707	1271	285	32	7	1	.	.	.	.	2302
0.50-0.99	.	1238	1168	64	7	2	.	.	.	.	2478
1.00-1.49	.	.	449	290	2	.	.	.	.	.	743
1.50-1.99	.	.	69	218	23	.	.	.	.	.	310
2.00-2.49	.	.	1	54	44	3	.	.	.	.	102
2.50-2.99	.	.	.	6	16	6	.	.	.	.	28
3.00-3.49	4	6	.	.	.	.	10
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	707	2509	1972	664	103	19	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 5596.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1026	2215	407	45							3693
0.50-0.99		1170	3008	75	19	1					4273
1.00-1.49			1159	721	7	3					1890
1.50-1.99			114	813	71	1					999
2.00-2.49				327	124	6					457
2.50-2.99				6	240	7		1			254
3.00-3.49					25	75					100
3.50-3.99						47					47
4.00-4.49						6					6
4.50-4.99							2				2
5.00-5.49							1	1			2
5.50-5.99								1			1
6.00-6.49								1			1
6.50-6.99											0
7.00+											0
TOTAL	1026	3385	4688	1987	486	146	3	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 10976.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	885	2644	532	40	3						4104
0.50-0.99		1060	4151	179	25	3					5418
1.00-1.49			1032	1424	70	4					2530
1.50-1.99			98	1059	441	33					1631
2.00-2.49				388	361	156					905
2.50-2.99				9	572	124					705
3.00-3.49					40	362					410
3.50-3.99						198					243
4.00-4.49						31	45				92
4.50-4.99							56	5			28
5.00-5.49							19	2			6
5.50-5.99								4			3
6.00-6.49								3			0
6.50-6.99									1		1
7.00+											0
TOTAL	885	3704	5813	3099	1512	911	130	21	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 15048.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	580	1528	438	31	2						2579
0.50-0.99		645	2962	135	24	4					3770
1.00-1.49			658	1300	34	7	1				2000
1.50-1.99			41	635	617	11		1			1305
2.00-2.49				202	240	167					609
2.50-2.99				1	312	179					492
3.00-3.49					6	386					394
3.50-3.99						241	2				294
4.00-4.49						7	53				61
4.50-4.99							74				33
5.00-5.49							19	14			6
5.50-5.99								6			2
6.00-6.49								2			3
6.50-6.99									3		0
7.00+											0
TOTAL	580	2173	4099	2304	1235	1002	149	23	3	0	

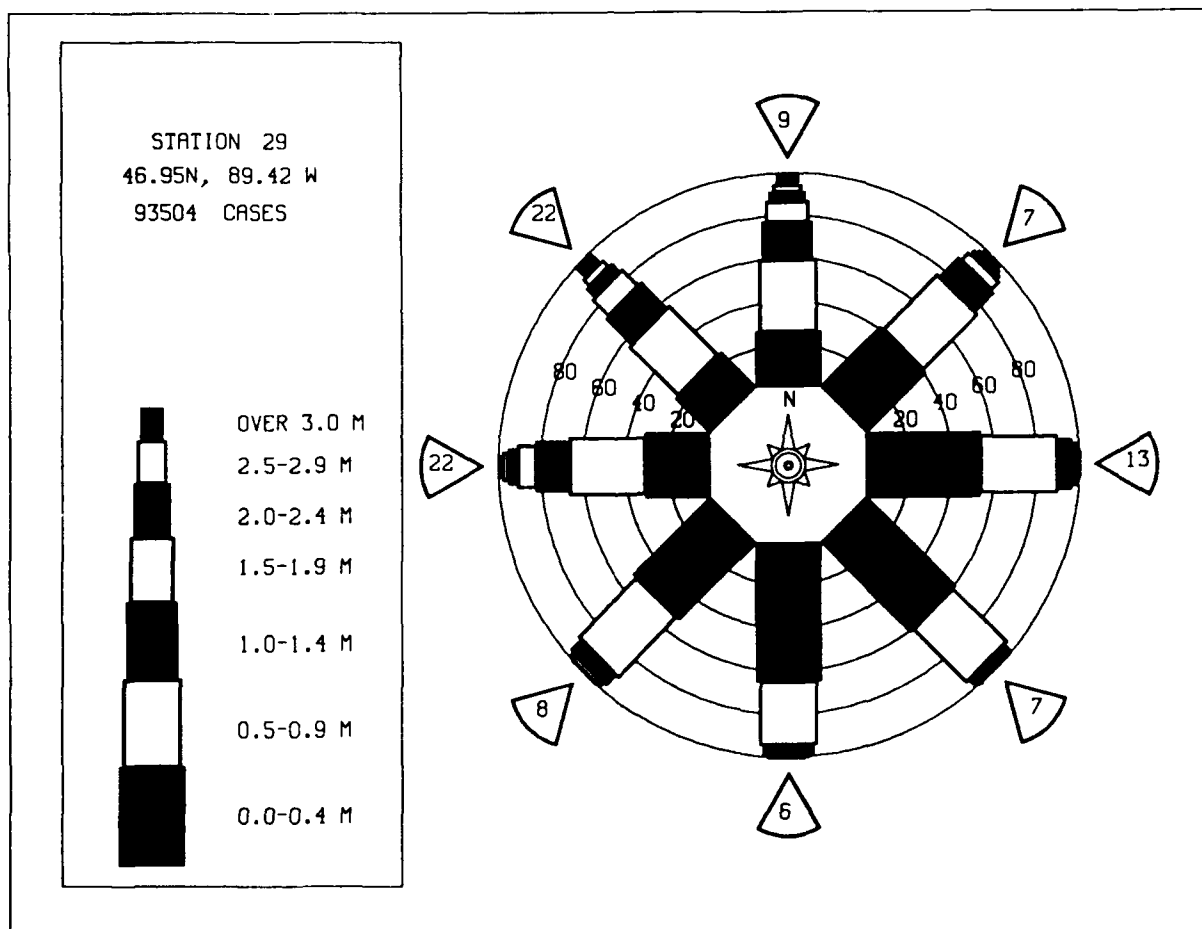
MEAN HS(M) = 1.2 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 10832.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	287	635	220	19							1161
0.50-0.99		362	1249	84	22	2					1719
1.00-1.49			396	649	22	8					1075
1.50-1.99			31	349	267	1					653
2.00-2.49				80	146	85					311
2.50-2.99				2	179	80			1		263
3.00-3.49						201					214
3.50-3.99						119	24				143
4.00-4.49						2	38				40
4.50-4.99							9				13
5.00-5.49								4			2
5.50-5.99								2			1
6.00-6.49									1		0
6.50-6.99											0
7.00+											0
TOTAL	287	997	1886	1183	645	502	77	6	2	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 5244.

STATION S29 46.95N 89.42W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT (METRES)	PEAK PERIOD (SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER
0.00-0.49	1179	2042	547	69	6	1	.	.	.	3844
0.50-0.99	.	1526	1765	152	39	10	.	.	.	3492
1.00-1.49	.	.	607	559	33	21	3	1	.	1224
1.50-1.99	.	.	86	366	178	15	5	2	.	652
2.00-2.49	.	.	4	122	107	53	2	1	.	289
2.50-2.99	.	.	.	4	151	52	1	1	.	209
3.00-3.49	10	119	3	1	.	133
3.50-3.99	70	15	1	.	86
4.00-4.49	5	20	2	.	27
4.50-4.99	6	4	1	11
5.00-5.49	2	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1179	3568	3009	1272	524	346	55	15	1	0
MEAN HS(M)=	0.8	LARGEST HS(M)=	6.9	MEAN TP(SEC)=	4.0	TOTAL CASES=	93504.			



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S29 (46.95N 89.42W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	1.0	1.0	1.1	0.7	0.6	0.6	0.5	0.7	1.0	1.4	1.3	0.9
1957	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.2	1.1	1.0	0.8	0.6	0.5	0.4	0.5	0.7	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S29 (46.95N 89.42W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	4.0	3.5	4.0	2.5	2.4	1.4	1.5	2.8	4.4	4.8	4.2	
1957	3.8	3.8	3.5	3.2	2.6	2.1	2.2	2.1	3.6	3.0	5.1	4.2	
1958	3.7	3.8	3.5	3.6	3.0	1.8	1.9	2.4	3.5	3.3	4.5	4.4	
1959	3.2	3.5	3.5	3.1	3.2	1.7	2.0	1.8	3.0	3.4	4.2	5.1	
1960	3.6	3.5	3.5	3.0	3.5	1.7	1.6	2.2	2.9	3.9	4.0	4.2	
1961	3.9	3.2	3.6	3.3	3.1	2.2	2.7	2.0	3.4	3.4	3.3	3.7	
1962	4.4	3.3	3.3	3.7	2.2	1.5	2.2	2.1	3.3	3.3	3.6	3.3	
1963	4.3	3.3	3.3	3.9	3.1	1.3	1.7	1.5	1.8	2.2	3.3	3.3	
1964	4.7	3.3	3.3	3.7	2.5	2.3	1.6	2.7	3.8	3.3	3.3	2.9	
1965	4.6	4.4	3.8	3.8	3.7	1.9	1.9	1.1	2.7	3.3	3.3	3.3	
1966	4.6	4.4	3.8	3.8	3.6	2.4	2.4	2.2	3.3	3.3	3.3	3.3	
1967	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1968	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1969	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1970	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1971	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1972	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1973	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1974	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1975	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1976	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1977	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1978	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1979	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1980	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1981	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1982	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1983	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1984	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1985	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1986	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	
1987	4.6	4.4	3.8	3.8	3.6	2.2	2.4	2.1	3.3	3.3	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S29

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	23.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66032321

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	237	625	226	19							1107
0.50-0.99		328	1141	142	28						1639
1.00-1.49			374	316	47	20	1				758
1.50-1.99			21	362	49	34	1				466
2.00-2.49				136	101	18	2				257
2.50-2.99				3	161	10	2				176
3.00-3.49					32	44		1	1		78
3.50-3.99						37	1	6			44
4.00-4.49						5	1	1	1		14
4.50-4.99									2		3
5.00-5.49									2		2
5.50-5.99										1	1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	237	953	1762	978	418	168	14	8	6	1	4262.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4262.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	208	480	133	10							831
0.50-0.99		319	750	98	24	1					1192
1.00-1.49			204	211	48	17					480
1.50-1.99			14	127	48	22					211
2.00-2.49				42	41	17	3				103
2.50-2.99					43	17	7				67
3.00-3.49					5	19	8	6			38
3.50-3.99						13	7	6			26
4.00-4.49							4	5	2		11
4.50-4.99							2	3	2	1	8
5.00-5.49							1	5	1	1	8
5.50-5.99									5		5
6.00-6.49									2	1	3
6.50-6.99									1	3	4
7.00+											0
TOTAL	208	799	1101	488	209	106	32	25	13	6	2809.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 2809.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	380	772	302	27							1481
0.50-0.99		419	1063	218	32						1736
1.00-1.49			302	310	47	14	2				675
1.50-1.99			16	189	66	44	2				317
2.00-2.49				54	45	34	10	1			144
2.50-2.99				2	57	37	10	4			110
3.00-3.49					5	37	7	5			54
3.50-3.99						17	17	5			36
4.00-4.49							13	8	2		24
4.50-4.99							1	6	4		10
5.00-5.49								6	1		7
5.50-5.99									1		3
6.00-6.49									2		2
6.50-6.99											0
7.00+											0
TOTAL	380	1191	1683	800	252	187	62	33	12	0	4317.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4317.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	580	864	269	19	2						1734
0.50-0.99		960	1103	122	29	3					2217
1.00-1.49			393	119	20	14	2				549
1.50-1.99			77	111	33	36	10	2			269
2.00-2.49				68	14	8	10	2			104
2.50-2.99				7	47	6	2	4	3		69
3.00-3.49					4	10	2	3	2		26
3.50-3.99						10	2	1	2	1	16
4.00-4.49						2	4	2	4		11
4.50-4.99							1	2	4		7
5.00-5.49								2	1		3
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	580	1824	1842	449	150	89	33	20	18	1	4698.

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4698.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	952	1268	379	27	6						2632
0.50-0.99		1880	1726	130	47	12					3795
1.00-1.49			867	31	24	41	3				966
1.50-1.99			239	137	5	16	8	2			407
2.00-2.49				115	1	9	18	3			146
2.50-2.99				39	2	1	5	3			50
3.00-3.49				4	6			1		1	12
3.50-3.99					3					1	4
4.00-4.49											1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	952	3148	3211	483	94	79	34	9	0	3	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 7505.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	757	996	260	35		2					2050
0.50-0.99		1242	776	59	25	8	1				2111
1.00-1.49			397	6	8	7	4	2			424
1.50-1.99			109	77		5	3	1			195
2.00-2.49				51		2		2			55
2.50-2.99				5	3		1				9
3.00-3.49					2						2
3.50-3.99					1						1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	757	2238	1542	233	39	24	9	5	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4542.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	735	1148	254	22	1						2160
0.50-0.99		1208	234	42	14	2					1500
1.00-1.49			207	1	3	6	1				218
1.50-1.99			41			1					42
2.00-2.49				1							1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	735	2356	736	6	18	9	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3673.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	635	903	170	17	5						1730
0.50-0.99		809	132	21	6	1					969
1.00-1.49			121	1	2	3					127
1.50-1.99			18	1			2				21
2.00-2.49								1			3
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	635	1712	442	41	13	4	2	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 2670.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	702	951	189	29	3						1874
0.50-0.99		786	79	19	9	3					896
1.00-1.49			127		1		1				130
1.50-1.99			11				1				12
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	702	1737	406	48	13	4	2	0	0	0	
MEAN HS(M) = 0.4	LARGEST HS(M) = 1.8		MEAN TP(SEC) = 3.0		NO. OF CASES = 2728.						

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	515	984	174	18							1691
0.50-0.99	.	867	242	18	10	3	.	.	.	.	1140
1.00-1.49	.	.	260	1		4	.	.	.	.	265
1.50-1.99	.	.	38	12	1	.	.	.	.	.	51
2.00-2.49	.	.	.	7			.	.	.	.	7
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	515	1851	714	56	11	7	0	0	0	0	
MEAN HS (M) = 0.5	LARGEST HS (M) = 2.3		MEAN TP (SEC) = 3.2		NO. OF CASES = 2956.						

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	552	964	278	18							1812
0.50-0.99	.	775	759	42	12	3	.	.	.	.	1591
1.00-1.49	.	.	490	25	10	4	.	.	.	.	529
1.50-1.99	.	.	78	119	8	.	.	.	.	.	205
2.00-2.49	.	.	1	85	3	.	.	.	.	.	89
2.50-2.99	.	.	.	4	1	.	.	.	.	.	5
3.00-3.49	2	1	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	552	1739	1606	293	36	8	0	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)=		3.2	MEAN TP(SEC)=		3.5	NO. OF CASES=		3968.		

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	568	1230	442	50	1						2291
0.50-0.99	.	765	1594	166	19		.	.	.	.	2545
1.00-1.49	.	.	975	264	14	1	.	.	.	.	2545
1.50-1.99	.	.	89	394	104		.	.	.	.	587
2.00-2.49	.	.	.	143	94	16	.	1	.	.	254
2.50-2.99	.	.	.	9	62	22	.	.	.	.	93
3.00-3.49	5	31	.	.	.	.	36
3.50-3.99	5	5	.	.	.	10
4.00-4.49	3	1	.	.	.	4
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	568	1995	3100	1026	299	79	6	1	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		4.1	MEAN TP(SEC)=		4.0	NO. OF CASES=		6626.		

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	812	2403	823	52	31	.	.	.	.	.	4090
0.50-0.99	.	1096	4117	522	31	.	.	.	.	.	5766
1.00-1.49	.	.	1101	1220	62	5	.	.	.	.	2388
1.50-1.99	.	.	97	759	371	22	.	.	.	.	1249
2.00-2.49	.	.	.	313	208	142	1	.	.	.	664
2.50-2.99	.	.	.	7	339	137	10	.	.	.	493
3.00-3.49	24	211	36	2	.	.	273
3.50-3.99	108	48	6	.	.	162
4.00-4.49	8	83	9	.	.	100
4.50-4.99	14	38	.	.	52
5.00-5.49	1	36	1	.	38
5.50-5.99	2	3	.	5
6.00-6.49	1	.	.	1
6.50-6.99	2	.	2
7.00+	1	2	3
TOTAL	812	3499	6138	2873	1035	633	193	94	7	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 14308.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	643	2495	467	25	1	1	.	.	.	.	3632
0.50-0.99	.	917	4140	201	32	.	.	.	.	.	5290
1.00-1.49	.	.	900	1478	51	6	.	.	.	.	2435
1.50-1.99	.	.	74	750	670	13	.	.	.	.	1507
2.00-2.49	.	.	.	251	312	269	1	.	.	.	833
2.50-2.99	430	254	9	.	.	.	693
3.00-3.49	9	456	19	1	.	.	485
3.50-3.99	214	83	1	1	.	299
4.00-4.49	12	121	13	.	.	146
4.50-4.99	26	32	.	.	58
5.00-5.49	1	33	.	.	34
5.50-5.99	5	2	.	7
6.00-6.49	1	1	.	3
6.50-6.99	1	.	1
7.00+	0	0
TOTAL	643	3412	5581	2705	1505	1225	260	86	6	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 14439.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	435	1206	342	21	1	.	.	.	.	.	2005
0.50-0.99	.	587	2587	150	23	2	.	.	.	.	3349
1.00-1.49	.	.	627	1115	28	14	1	.	.	.	1785
1.50-1.99	.	.	36	671	438	14	.	.	.	.	1149
2.00-2.49	.	.	.	198	285	106	.	.	.	.	589
2.50-2.99	.	.	.	2	320	136	.	.	.	.	461
3.00-3.49	4	346	.	.	.	.	350
3.50-3.99	143	7	.	.	.	150
4.00-4.49	8	39	.	.	.	47
4.50-4.99	12	1	.	.	13
5.00-5.49	1	8	.	.	9
5.50-5.99	1	.	.	1
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	435	1793	3592	2157	1099	762	60	11	1	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 9281.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

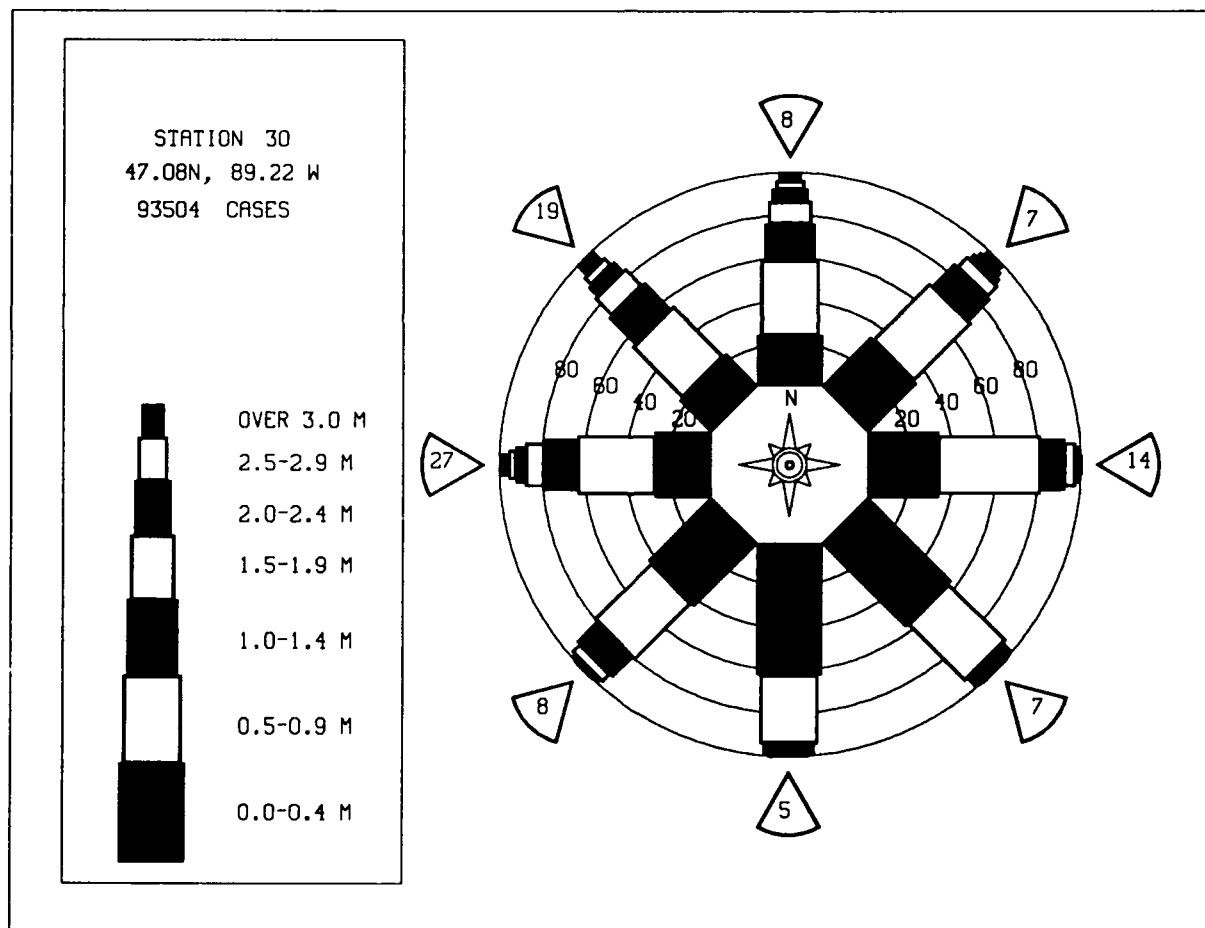
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	220	495	198	18	.	.	.	.	.	.	931
0.50-0.99	.	322	1124	94	35	1	.	.	.	.	1576
1.00-1.49	.	.	408	527	28	18	.	.	.	.	981
1.50-1.99	.	.	20	454	132	8	.	.	.	.	614
2.00-2.49	.	.	.	151	181	24	.	.	.	.	356
2.50-2.99	.	.	.	2	203	59	.	.	.	.	264
3.00-3.49	33	182	2	.	.	.	217
3.50-3.99	70	1	.	.	.	71
4.00-4.49	9	10	.	.	.	19
4.50-4.99	6	1	.	.	7
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	220	817	1750	1246	612	371	19	1	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 4722.

STATION S30 47.08N 89.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	894	1779	491	41	2						3207
0.50-0.99		1328	2157	205	38	4					3732
1.00-1.49			776	582	39	18	1				1396
1.50-1.99			98	416	192	20	2				728
2.00-2.49				162	129	64	4	1			360
2.50-2.99				8	167	68	4	1			248
3.00-3.49					13	134	7	2			156
3.50-3.99						62	17	2			81
4.00-4.49						5	28	4			37
4.50-4.99							6	8	1		15
5.00-5.49								9			9
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	894	3107	3522	1394	580	375	69	27	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S30 (47.08N 89.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	1.1	1.1	1.2	0.8	0.6	0.6	0.5	0.7	1.1	1.5	1.3	1.0
1957	1.5	1.3	1.0	0.9	0.9	0.7	0.6	0.6	0.8	1.0	1.1	1.2	1.0
1958	0.8	1.4	0.5	0.9	0.9	0.7	0.6	0.6	0.8	1.0	1.1	1.1	0.9
1959	1.1	1.0	0.9	0.8	0.8	0.6	0.5	0.5	0.8	0.9	1.4	1.4	0.9
1960	1.2	1.2	0.9	1.0	0.8	0.5	0.5	0.6	0.8	1.0	1.4	1.2	0.9
1961	1.0	1.0	1.2	0.9	0.8	0.7	0.5	0.4	0.7	0.9	1.0	1.1	0.9
1962	1.5	1.0	0.8	0.8	0.6	0.4	0.4	0.4	0.5	0.8	0.8	1.1	0.8
1963	1.3	1.1	1.0	0.7	0.6	0.5	0.5	0.5	0.6	0.7	1.2	1.2	0.8
1964	1.2	1.0	1.2	1.0	0.8	0.6	0.5	0.7	0.8	1.0	1.1	1.0	0.9
1965	1.5	1.1	1.5	1.0	0.7	0.5	0.5	0.4	0.7	1.1	1.1	1.4	1.0
1966	1.6	1.5	1.7	1.1	1.1	0.6	0.6	0.6	0.9	1.5	1.5	1.5	1.2
1967	1.5	1.5	1.3	1.0	0.9	0.6	0.7	0.7	0.8	1.5	1.4	1.1	1.1
1968	1.2	2.3	1.5	1.1	0.7	0.6	0.7	0.7	0.7	1.1	1.7	1.1	1.2
1969	1.5	0.0	0.9	1.2	0.8	0.7	0.6	0.4	0.6	1.0	0.9	0.9	0.9
1970	1.0	1.3	0.9	0.9	0.8	0.5	0.5	0.5	0.8	0.8	1.1	1.0	0.9
1971	1.3	1.3	1.1	0.9	0.7	0.4	0.5	0.5	0.5	0.9	1.1	1.0	0.8
1972	1.5	1.1	1.1	0.7	0.4	0.5	0.4	0.4	0.7	1.1	0.8	1.1	0.8
1973	1.2	1.1	1.1	0.9	0.8	0.6	0.5	0.4	0.8	0.9	1.1	1.0	0.9
1974	1.0	0.8	1.1	0.8	0.7	0.7	0.6	0.6	0.7	0.9	1.1	1.1	0.8
1975	1.2	1.1	1.3	0.7	0.4	0.5	0.5	0.5	0.7	0.9	0.9	0.9	0.8
1976	1.2	2.2	1.3	0.8	0.6	0.5	0.3	0.5	0.6	0.5	0.9	1.1	0.8
1977	1.5	1.1	1.4	0.6	0.6	0.5	0.5	0.5	0.7	0.9	0.9	2.2	0.9
1978	1.3	0.9	0.9	0.9	0.5	0.5	0.4	0.5	0.8	0.8	1.1	1.1	0.9
1979	1.1	0.8	1.1	0.7	0.6	0.5	0.4	0.5	0.7	0.8	1.1	1.1	0.8
1980	1.2	0.9	1.1	0.7	0.7	0.6	0.4	0.5	0.9	1.2	1.0	1.3	0.9
1981	1.2	1.1	1.1	0.8	0.5	0.6	0.4	0.4	0.8	0.9	1.0	0.9	0.8
1982	1.6	2.2	1.4	1.0	0.7	0.6	0.5	0.5	0.7	0.9	1.1	1.3	1.0
1983	1.0	0.9	1.1	0.7	0.7	0.5	0.5	0.4	0.7	0.8	1.1	1.4	0.9
1984	1.1	0.9	1.2	0.9	0.7	0.6	0.5	0.4	0.7	0.9	1.1	1.4	0.9
1985	1.5	2.2	1.3	0.8	0.6	0.7	0.4	0.5	0.5	0.7	1.1	1.4	0.9
1986	1.2	0.8	1.2	1.0	0.6	0.6	0.4	0.4	0.7	0.8	1.1	1.0	0.8
1987	1.0	1.0	1.1	0.6	0.5	0.4	0.4	0.5	0.5	1.0	1.1	0.9	0.8
MEAN	1.2	1.2	1.1	0.9	0.7	0.6	0.5	0.5	0.7	0.9	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S30 (47.08N 89.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.2	3.3	3.9	4.0	2.7	2.5	1.6	1.8	2.8	4.3	4.7	4.4	
1957	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1958	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1959	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1960	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1961	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1962	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1963	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1964	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1965	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1966	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1967	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1968	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1969	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1970	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1971	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1972	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1973	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1974	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1975	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1976	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1977	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1978	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1979	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1980	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1981	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1982	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1983	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1984	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1985	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1986	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	
1987	3.3	3.4	3.3	3.3	2.2	2.2	2.2	2.2	3.3	2.2	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S30

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	272.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	294	640	216	20	1	.	.	.	.	.	1171
0.50-0.99	.	380	1163	135	22	1	.	.	.	.	1701
1.00-1.49	.	.	404	318	37	23	1	.	.	.	783
1.50-1.99	.	.	27	350	53	14	1	.	.	.	445
2.00-2.49	.	.	.	152	73	17	.	.	.	.	242
2.50-2.99	.	.	.	2	161	11	3	.	.	.	177
3.00-3.49	27	41	.	1	.	.	69
3.50-3.99	34	3	4	.	.	41
4.00-4.49	9	3	2	.	.	14
4.50-4.99	2	.	3	.	5
5.00-5.49	1	.	3	1	5
5.50-5.99	0
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	294	1020	1810	977	374	150	14	7	7	1	4367.

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4367.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	213	516	167	17	2	.	.	.	.	.	915
0.50-0.99	.	326	757	79	29	1	.	.	.	.	1192
1.00-1.49	.	.	210	205	33	17	1	.	.	.	466
1.50-1.99	.	.	13	130	48	20	1	.	.	.	212
2.00-2.49	.	.	1	42	31	11	4	.	.	.	89
2.50-2.99	47	11	6	.	.	.	64
3.00-3.49	6	19	5	.	.	.	39
3.50-3.99	13	8	.	.	.	24
4.00-4.49	7	.	2	.	14
4.50-4.99	3	1	.	4
5.00-5.49	3	4	.	7
5.50-5.99	1	1	.	2
6.00-6.49	1	3	4
6.50-6.99	0
7.00+	0
TOTAL	213	842	1148	473	196	92	32	27	13	3	2857.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 2857.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	442	818	350	45	4	.	.	.	.	.	1659
0.50-0.99	.	438	945	189	24	7	.	.	.	.	1603
1.00-1.49	.	.	295	291	42	18	1	.	.	.	647
1.50-1.99	.	.	33	147	58	31	7	.	.	.	276
2.00-2.49	.	.	.	65	36	17	7	5	.	.	130
2.50-2.99	.	.	.	1	59	39	5	4	.	.	108
3.00-3.49	3	34	5	2	1	.	45
3.50-3.99	9	13	2	1	.	25
4.00-4.49	1	10	7	4	.	22
4.50-4.99	3	6	3	.	12
5.00-5.49	2	.	.	2
5.50-5.99	2	.	2
6.00-6.49	1	1	2
6.50-6.99	0
7.00+	0
TOTAL	442	1256	1623	738	226	156	51	28	12	1	4256.

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4256.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	780	1212	348	52	4	.	.	.	.	.	2396
0.50-0.99	.	1140	529	119	38	19	.	.	.	.	1845
1.00-1.49	.	.	201	79	25	44	11	3	.	.	363
1.50-1.99	.	.	44	37	31	21	19	8	1	.	161
2.00-2.49	.	.	3	16	5	5	8	3	5	.	45
2.50-2.99	.	.	.	2	14	1	3	3	3	.	26
3.00-3.49	.	.	.	1	3	6	.	2	3	.	15
3.50-3.99	2	1	1	1	.	5
4.00-4.49	1	4	2	1	.	8
4.50-4.99	2	1	3
5.00-5.49	0
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	780	2352	1125	306	120	99	46	22	17	1	4567.

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 4567.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1283	2077	483	82	16	2	.	.	.	.	3943
0.50-0.99	.	2399	310	110	56	38	3	.	.	.	2916
1.00-1.49	.	.	510	29	25	64	11	3	.	.	642
1.50-1.99	.	.	120	6	6	28	26	9	1	.	196
2.00-2.49	.	.	24	7	1	3	5	7	1	1	49
2.50-2.99	.	.	.	4	.	.	.	1	.	1	6
3.00-3.49	1	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1283	4476	1447	238	104	135	45	20	2	3	7263

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 7263.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	843	1120	279	54	7	1	.	.	.	.	2304
0.50-0.99	.	1381	231	49	33	6	2	.	.	.	1702
1.00-1.49	.	.	281	3	2	16	4	2	.	.	308
1.50-1.99	.	.	66	2	.	5	2	2	.	.	79
2.00-2.49	.	.	2	2	.	1	.	.	.	.	5
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	843	2501	859	113	42	28	9	4	0	0	4120

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4120.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	801	1028	255	26	2	.	1	.	.	.	2112
0.50-0.99	.	1124	201	22	11	8	1	.	.	.	1367
1.00-1.49	.	.	159	3	1	3	1	2	.	.	169
1.50-1.99	.	.	41	.	.	2	.	.	.	.	43
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	801	2152	656	52	14	13	2	2	0	0	3458

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3458.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	681	930	145	14	3	.	.	.	.	.	1773
0.50-0.99	.	1015	164	17	12	4	.	.	.	.	1212
1.00-1.49	.	.	167	1	1	1	1	.	.	.	171
1.50-1.99	.	.	29	1	.	.	.	1	.	.	34
2.00-2.49	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	681	1945	505	36	16	5	2	1	0	0	2991

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2991.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	760	1018	166	25	1	.	.	.	.	.	1970
0.50-0.99	.	940	79	10	8	1	.	.	.	.	1038
1.00-1.49	.	.	205	2	.	1	.	.	.	.	208
1.50-1.99	.	.	23	.	.	.	.	.	.	.	23
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	760	1958	474	37	9	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3034.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	570	894	120	14	1	1	.	.	.	.	1600
0.50-0.99	.	909	102	11	6	4	.	.	.	.	1032
1.00-1.49	.	.	226	.	.	3	.	.	.	.	229
1.50-1.99	.	.	37	2	.	.	.	.	.	.	39
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	570	1803	485	29	7	8	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2719.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	572	980	204	19	1	.	.	.	.	.	1776
0.50-0.99	.	1026	433	28	10	3	.	.	.	.	1500
1.00-1.49	.	.	243	27	7	2	1	.	.	.	280
1.50-1.99	.	.	87	48	3	1	1	1	.	.	140
2.00-2.49	.	.	3	16	.	1	.	.	.	.	20
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	572	2006	970	138	21	7	1	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 3482.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	526	1204	424	48	4	1	.	.	.	.	2207
0.50-0.99	.	1128	1275	137	7	1	.	.	.	.	2548
1.00-1.49	.	.	736	344	25	1	.	.	.	.	1106
1.50-1.99	.	.	81	270	133	2	.	.	.	.	486
2.00-2.49	.	.	1	94	75	22	.	.	.	.	192
2.50-2.99	.	.	.	5	35	21	1	.	.	.	62
3.00-3.49	6	14	1	.	.	.	21
3.50-3.99	6	2	.	.	.	8
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	526	2332	2517	898	285	70	4	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6213.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	753	2376	964	51	25	.	.	.	.	.	4144
0.50-0.99	.	1127	4095	560	25	.	.	.	.	.	5807
1.00-1.49	.	.	1275	1273	105	3	.	.	.	.	2656
1.50-1.99	.	.	131	798	407	25	.	.	.	.	1361
2.00-2.49	.	.	1	297	237	158	4	.	.	.	697
2.50-2.99	.	.	.	9	337	149	27	.	.	.	522
3.00-3.49	18	216	34	6	.	.	274
3.50-3.99	104	67	13	1	.	185
4.00-4.49	5	71	13	.	.	89
4.50-4.99	1	13	40	.	.	54
5.00-5.49	1	44	.	.	45
5.50-5.99	6	3	.	9
6.00-6.49	1	.	.	3
6.50-6.99	2	.	2
7.00+	3	3
TOTAL	753	3503	6466	2988	1129	661	217	123	8	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 14842.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	658	2550	511	31	2	.	.	.	.	.	3752
0.50-0.99	.	965	4442	245	19	.	.	.	.	.	5671
1.00-1.49	.	.	922	1589	60	4	.	.	.	.	2575
1.50-1.99	.	.	84	748	744	31	.	.	.	.	1607
2.00-2.49	.	.	.	274	310	289	1	.	.	.	884
2.50-2.99	.	.	.	5	462	257	24	1	.	.	749
3.00-3.49	13	455	37	5	.	.	510
3.50-3.99	194	103	7	1	.	305
4.00-4.49	13	113	24	1	.	151
4.50-4.99	31	42	1	.	74
5.00-5.49	1	29	2	.	32
5.50-5.99	8	4	.	12
6.00-6.49	1	3	.	4
6.50-6.99	0
7.00+	1	0	1
TOTAL	658	3515	5959	2892	1610	1253	310	117	13	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 15286.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	438	1235	330	27	.	.	.	.	.	.	2030
0.50-0.99	.	601	2617	109	24	2	.	.	.	.	3353
1.00-1.49	.	.	605	1106	27	7	.	.	.	.	1745
1.50-1.99	.	.	36	649	450	3	.	.	.	.	1138
2.00-2.49	.	.	.	195	274	137	.	.	.	.	608
2.50-2.99	.	.	.	3	321	148	.	.	.	.	472
3.00-3.49	8	341	2	.	.	.	351
3.50-3.99	131	18	.	.	.	149
4.00-4.49	11	40	.	.	.	51
4.50-4.99	11	3	.	.	14
5.00-5.49	7	.	.	7
5.50-5.99	3	1	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	438	1836	3588	2089	1104	780	71	13	2	0	

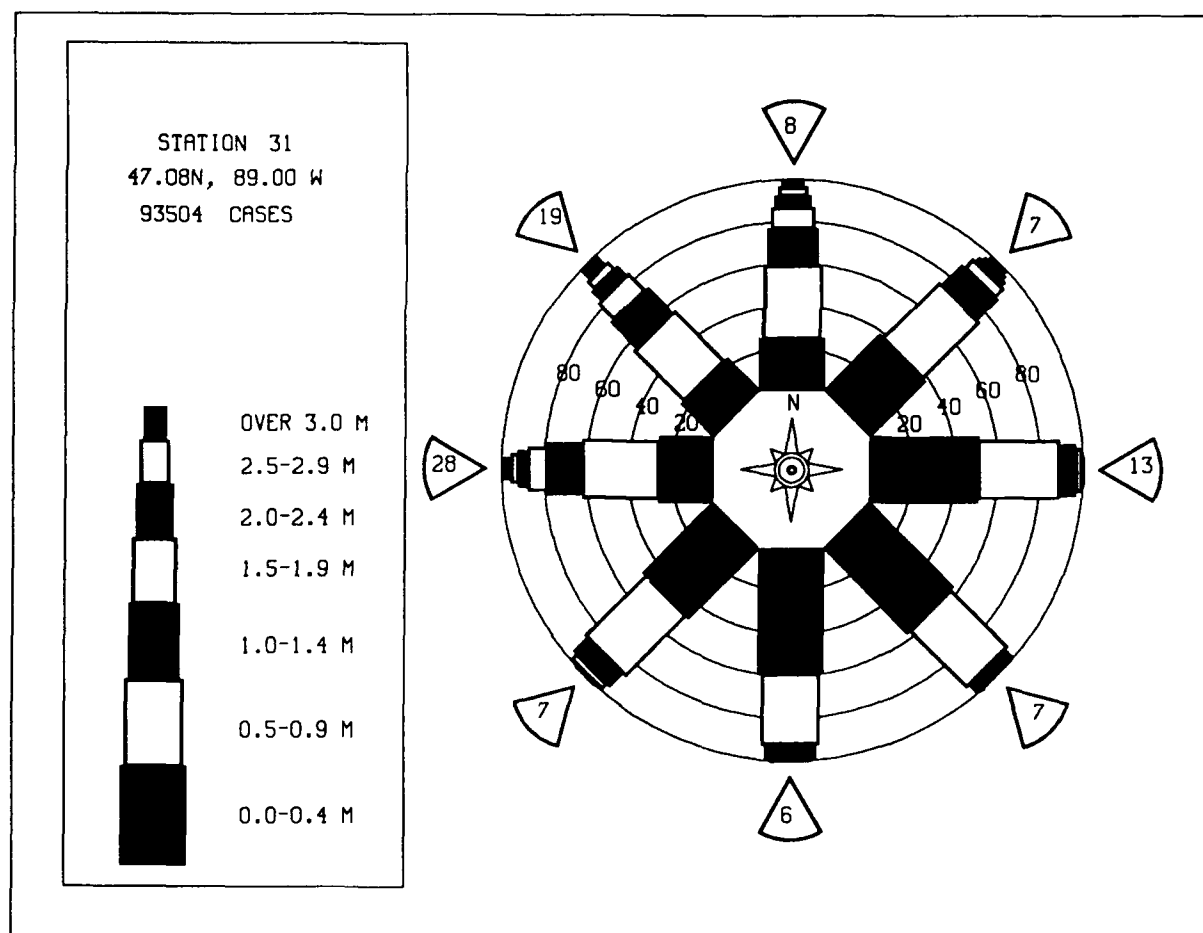
MEAN HS(M) = 1.2 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 9291.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	224	506	196	20	.	.	.	.	.	.	946
0.50-0.99	.	347	1084	77	32	1	.	.	.	.	1541
1.00-1.49	.	.	410	518	24	6	.	.	.	.	958
1.50-1.99	.	.	29	496	127	2	.	.	.	.	654
2.00-2.49	.	.	.	172	180	44	.	.	.	.	396
2.50-2.99	.	.	.	1	234	54	.	.	1	.	290
3.00-3.49	27	155	2	.	.	.	184
3.50-3.99	77	1	.	.	.	78
4.00-4.49	4	18	.	.	.	22
4.50-4.99	5	.	.	.	5
5.00-5.49	1	1	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	224	853	1719	1284	624	343	27	1	1	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 4758.

STATION S31 47.08N 89.00W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER
0.00-0.49	984	1911	516	55	5	9	.	.	.	3471
0.50-0.99	.	1525	1843	190	36	21	3	1	.	3603
1.00-1.49	.	.	685	379	42	18	3	1	.	1231
1.50-1.99	.	.	89	369	206	71	3	2	.	689
2.00-2.49	.	.	3	134	122	167	7	1	.	334
2.50-2.99	.	.	.	3	11	128	8	2	.	246
3.00-3.49	57	6	2	.	149
3.50-3.99	4	2	1	.	81
4.00-4.49	6	1	.	33
4.50-4.99	1	.	16
5.00-5.49	9
5.50-5.99	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	984	3436	3136	1330	589	377	79	33	2	0
MEAN HS(M)= 0.9 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S31 (47.08N 89.00W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.1	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.1	1.4	1.3	0.9
1957	1.0	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1958	1.0	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1959	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1960	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1961	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1962	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1963	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1964	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1965	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1966	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1967	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1968	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1969	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1970	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1971	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1972	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1973	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1974	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1975	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1976	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1977	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1978	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1979	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1980	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1981	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1982	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1983	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1984	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1985	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1986	1.1	1.1	1.1	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1987	1.0	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.5	0.9	1.1	0.9	0.7
MEAN	1.2	1.2	1.1	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S31 (47.08N 89.00W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.2	3.9	3.2	3.8	2.7	2.5	1.6	1.8	2.8	4.3	4.7	4.5	
1957	3.7	3.5	3.7	3.2	2.8	2.5	2.3	2.2	3.3	2.8	4.1	5.3	
1958	3.3	3.6	3.8	4.8	3.1	1.8	2.2	2.3	3.4	4.3	5.3	4.7	
1959	3.4	3.9	5.6	3.2	4.1	1.8	2.5	1.8	3.3	3.5	5.2	5.5	
1960	3.9	4.1	4.4	3.6	3.5	1.8	1.6	2.8	2.8	4.0	4.4	4.4	
1961	3.6	3.8	4.9	3.2	2.7	2.8	2.8	2.0	3.8	2.9	4.1	4.4	
1962	4.7	3.7	2.9	3.3	2.8	1.7	2.9	1.9	2.5	5.4	4.2	4.4	
1963	4.2	4.4	3.5	3.9	1.8	1.4	1.8	1.7	2.1	2.7	3.3	3.5	
1964	4.7	4.7	4.1	4.4	2.6	2.5	2.0	2.8	4.1	4.0	5.1	3.6	
1965	4.3	5.9	3.7	2.9	2.4	2.0	1.9	1.8	3.1	4.6	6.2	2.2	
1966	7.0	4.5	6.9	3.5	4.0	3.8	2.7	3.0	3.5	6.2	5.1	5.2	
1967	6.2	4.6	3.9	4.7	3.4	2.4	4.0	2.4	3.3	5.2	4.7	5.5	
1968	4.0	6.1	1.1	4.4	3.4	2.9	3.4	3.0	3.3	4.6	5.5	5.4	
1969	4.7	4.0	5.6	3.6	2.2	2.2	2.6	2.9	2.7	3.5	4.0	4.1	
1970	3.6	4.7	3.3	3.6	3.6	2.0	2.3	2.2	3.3	3.6	4.4	4.8	
1971	4.0	5.3	3.5	4.2	2.0	1.1	2.2	1.8	0.0	4.4	5.4	4.4	
1972	4.7	3.9	3.6	3.3	1.1	2.2	1.5	1.4	4.0	5.4	2.9	4.3	
1973	3.5	3.3	3.4	3.9	3.3	1.5	2.9	1.7	4.4	3.6	3.4	3.3	
1974	4.0	3.3	2.2	2.8	2.3	1.1	3.1	2.3	2.9	3.3	4.0	2.8	
1975	3.9	6.3	5.8	2.2	1.8	2.2	2.1	2.3	3.3	4.6	4.4	4.4	
1976	4.8	4.4	3.5	3.6	2.8	1.5	0.9	1.8	2.2	3.3	3.3	3.3	
1977	5.3	3.7	3.3	3.3	2.1	1.6	3.4	2.4	3.3	3.3	4.4	4.4	
1978	5.3	3.7	3.3	3.3	1.9	1.8	1.3	1.7	3.3	3.3	3.3	3.3	
1979	3.6	2.7	3.6	3.3	2.4	1.8	1.9	2.1	1.1	3.3	3.3	3.3	
1980	6.7	4.4	5.5	3.3	2.7	1.4	1.4	2.0	3.3	3.3	3.3	3.3	
1981	3.9	3.5	4.4	3.3	1.6	3.3	1.0	1.2	3.3	3.3	3.3	3.3	
1982	5.5	4.4	3.3	3.3	2.0	3.3	2.5	1.8	3.3	3.3	3.3	3.3	
1983	3.3	4.4	3.3	3.3	1.1	2.2	2.8	1.6	3.3	3.3	3.3	3.3	
1984	4.6	3.1	4.6	3.8	3.6	2.3	2.8	1.6	3.3	3.3	3.3	3.3	
1985	5.2	3.1	4.4	3.8	2.8	4.2	1.1	1.9	3.3	3.3	3.3	3.3	
1986	4.4	3.1	3.9	3.8	2.8	1.6	1.4	1.4	3.3	3.3	3.3	3.3	
1987	3.4	4.6	3.4	2.5	2.5	1.7	1.2	2.9	2.3	3.8	4.1	3.4	

32 YR. STATISTICS FOR WIS STATION S31

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	8.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	272.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	269	601	212	10	27	1	.	.	.	.	1093
0.50-0.99	.	372	1103	136	45	23	1	.	.	.	1639
1.00-1.49	.	.	412	278	43	20	1	.	.	.	759
1.50-1.99	.	.	29	352	86	19	2	.	.	.	445
2.00-2.49	.	.	.	162	180	10	2	.	.	.	269
2.50-2.99	.	.	.	2	32	43	1	.	.	.	174
3.00-3.49	1	39	3	.	1	.	77
3.50-3.99	4	4	4	.	.	47
4.00-4.49	3	.	.	11
4.50-4.99	1	.	2	.	3
5.00-5.49	1	.	2	.	3
5.50-5.99	1	1
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	269	973	1756	940	394	160	16	7	6	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 4244.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	194	465	174	9	.	1	.	.	.	.	843
0.50-0.99	.	317	722	121	18	.	.	.	.	.	1178
1.00-1.49	.	.	210	199	49	14	.	.	.	.	472
1.50-1.99	.	.	12	143	40	32	2	.	.	.	229
2.00-2.49	.	.	.	40	33	21	4	.	.	.	98
2.50-2.99	48	16	3	.	.	.	67
3.00-3.49	2	25	16	2	.	.	45
3.50-3.99	14	6	2	1	.	23
4.00-4.49	8	5	2	.	15
4.50-4.99	2	3	1	.	6
5.00-5.49	5	3	.	8
5.50-5.99	2	3	.	5
6.00-6.49	1	3	.	4
6.50-6.99	2	.	2
7.00+	0
TOTAL	194	782	1118	512	190	123	41	20	15	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 2816.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	394	763	373	27	2	.	.	.	.	.	1559
0.50-0.99	.	434	983	218	21	3	.	.	.	.	1659
1.00-1.49	.	.	302	281	57	12	1	.	.	.	653
1.50-1.99	.	.	28	160	58	34	4	.	.	.	284
2.00-2.49	.	.	.	68	35	19	10	2	.	.	134
2.50-2.99	.	.	.	2	55	38	9	5	.	.	109
3.00-3.49	4	33	4	6	.	.	47
3.50-3.99	14	9	2	.	.	25
4.00-4.49	11	4	1	.	16
4.50-4.99	2	6	4	.	12
5.00-5.49	1	2	1	.	4
5.50-5.99	3	.	3
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	394	1197	1686	756	232	153	51	27	10	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4231.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	715	1150	416	35	1	.	.	.	.	.	2317
0.50-0.99	.	1112	485	191	39	10	.	.	.	.	1837
1.00-1.49	.	.	206	77	42	50	5	1	.	.	381
1.50-1.99	.	.	36	38	22	52	21	8	.	.	177
2.00-2.49	.	.	1	16	7	7	8	5	3	.	47
2.50-2.99	.	.	.	6	9	3	3	5	1	.	31
3.00-3.49	.	.	.	1	2	7	.	8	1	.	19
3.50-3.99	2	.	5	.	.	3
4.00-4.49	5	3	1	.	9
4.50-4.99	3	.	3
5.00-5.49	1	1	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	715	2262	1144	364	122	131	42	32	14	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4527.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1227	2023	579	79	8	2	.	.	.	.	3918
0.50-0.99	.	2392	322	158	72	33	1	.	.	.	2978
1.00-1.49	.	.	466	29	58	77	7	3	.	.	640
1.50-1.99	.	.	117	3	12	51	21	12	2	.	218
2.00-2.49	.	.	19	2	2	5	18	10	4	.	60
2.50-2.99	.	.	.	6	.	.	3	4	.	1	14
3.00-3.49	.	.	.	1	.	.	.	.	.	2	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1227	4415	1503	278	152	168	50	29	6	3	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7336.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	771	1110	310	42	2	1	.	.	.	.	2236
0.50-0.99	.	1407	216	73	39	6	.	1	.	.	1742
1.00-1.49	.	.	282	4	6	19	5	2	.	.	318
1.50-1.99	.	.	77	4	.	7	3	2	.	.	93
2.00-2.49	.	.	3	2	.	.	1	1	.	.	7
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	771	2517	888	126	47	33	9	6	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4118.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	755	1006	283	17	4	.	.	.	.	.	2065
0.50-0.99	.	1082	189	35	8	6	.	1	.	.	1321
1.00-1.49	.	.	158	2	1	5	1	1	.	.	168
1.50-1.99	.	.	42	1	.	2	.	.	.	.	45
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	755	2088	672	56	13	13	1	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3371.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	607	851	130	20	3	.	.	.	.	.	1611
0.50-0.99	.	902	156	10	14	1	.	.	.	.	1083
1.00-1.49	.	.	144	.	1	2	1	.	.	.	148
1.50-1.99	.	.	25	4	.	.	1	.	.	.	30
2.00-2.49	.	.	.	1	.	.	.	1	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	607	1753	455	35	18	3	2	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2693.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	651	914	178	20	2	1	.	.	.	.	1765
0.50-0.99	.	798	82	10	7	.	.	.	.	.	898
1.00-1.49	.	.	141	.	.	1	.	.	.	.	142
1.50-1.99	.	.	14	.	.	.	.	.	.	.	14
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	651	1713	416	30	9	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2643.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	541	1104	127	13	2	1	.	.	.	.	1788
0.50-0.99	.	1009	168	12	5	2	.	.	.	.	1196
1.00-1.49	.	.	279	2	.	4	.	.	.	.	285
1.50-1.99	.	.	52	20	.	.	.	.	.	.	72
2.00-2.49	.	.	.	7	.	.	.	.	.	.	7
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	541	2113	626	54	7	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 3137.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	510	1037	350	12	.	.	.	.	.	.	1909
0.50-0.99	.	612	871	59	10	2	.	.	.	.	1754
1.00-1.49	.	.	532	47	12	3	1	.	.	.	593
1.50-1.99	.	.	85	142	7	3	.	.	.	.	237
2.00-2.49	.	.	.	95	2	2	.	.	.	.	99
2.50-2.99	.	.	.	10	4	1	.	.	.	.	15
3.00-3.49	1	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	510	1849	1838	365	35	11	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4320.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	501	1307	628	52	1	1	.	.	.	.	2490
0.50-0.99	.	791	1797	263	16	.	.	.	.	.	2867
1.00-1.49	.	.	1020	381	43	2	.	.	.	.	1446
1.50-1.99	.	.	97	467	173	11	.	.	.	.	748
2.00-2.49	.	.	.	180	104	64	1	.	.	.	329
2.50-2.99	.	.	.	13	112	55	.	.	.	.	180
3.00-3.49	7	54	5	1	.	.	67
3.50-3.99	1	18	14	5	.	.	38
4.00-4.49	7	11	.	.	.	18
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	1
TOTAL	501	2098	3542	1336	457	212	32	7	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 7669.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	729	2403	612	27	24	.	.	.	.	.	3771
0.50-0.99	.	1033	4302	379	24	.	.	.	.	.	5738
1.00-1.49	.	.	1175	1316	96	1	.	.	.	.	2588
1.50-1.99	.	.	96	813	466	48	.	.	.	.	1423
2.00-2.49	.	.	.	300	234	210	3	.	.	.	747
2.50-2.99	.	.	.	8	350	174	24	2	.	.	558
3.00-3.49	28	269	54	1	.	.	352
3.50-3.99	112	93	13	.	.	218
4.00-4.49	14	87	19	.	.	120
4.50-4.99	17	54	1	.	72
5.00-5.49	1	48	.	.	49
5.50-5.99	12	9	.	21
6.00-6.49	0
6.50-6.99	1
7.00+	1	3	3
TOTAL	729	3436	6185	2843	1198	828	279	149	11	3	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 14661.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	587	2417	472	18	2	.	.	.	.	.	3496
0.50-0.99	.	910	4320	243	14	.	.	.	.	.	5487
1.00-1.49	.	.	888	1613	72	6	.	.	.	.	2579
1.50-1.99	.	.	80	730	756	28	.	.	.	.	1594
2.00-2.49	.	.	.	249	299	328	1	.	.	.	877
2.50-2.99	.	.	.	4	450	252	24	.	.	.	730
3.00-3.49	16	430	42	3	.	.	491
3.50-3.99	197	103	3	.	.	304
4.00-4.49	10	119	18	1	.	147
4.50-4.99	31	50	1	.	82
5.00-5.49	1	29	1	.	31
5.50-5.99	9	8	.	17
6.00-6.49	7	.	7
6.50-6.99	2	1	3
7.00+	1	1
TOTAL	587	3327	5760	2857	1609	1251	321	112	20	2	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 14835.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	390	1152	325	13	.	.	.	.	.	.	1880
0.50-0.99	.	579	2340	109	24	1	.	.	.	.	3053
1.00-1.49	.	.	591	928	21	7	.	.	.	.	1547
1.50-1.99	.	.	42	638	380	3	.	.	.	.	1063
2.00-2.49	.	.	.	202	213	103	1	.	.	.	519
2.50-2.99	.	.	.	4	289	127	.	.	.	.	420
3.00-3.49	8	312	.	.	.	.	320
3.50-3.99	112	9	.	.	.	121
4.00-4.49	9	43	.	.	.	52
4.50-4.99	9	.	.	.	14
5.00-5.49	1	5	.	.	6
5.50-5.99	1	.	.	1
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	390	1731	3298	1894	935	674	63	12	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 8428.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	201	478	186	17	1	.	.	.	.	.	883
0.50-0.99	.	346	1056	104	29	1	.	.	.	.	1536
1.00-1.49	.	.	427	436	25	11	.	.	.	.	899
1.50-1.99	.	.	27	483	101	9	.	.	.	.	620
2.00-2.49	.	.	.	188	146	17	1	.	.	.	352
2.50-2.99	.	.	.	2	212	36	.	.	.	.	250
3.00-3.49	32	110	2	.	.	.	144
3.50-3.99	68	1	.	.	.	70
4.00-4.49	4	9	.	.	.	13
4.50-4.99	5	.	.	.	5
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	201	824	1696	1230	546	257	18	1	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 4475.

STATION S32 47.23N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

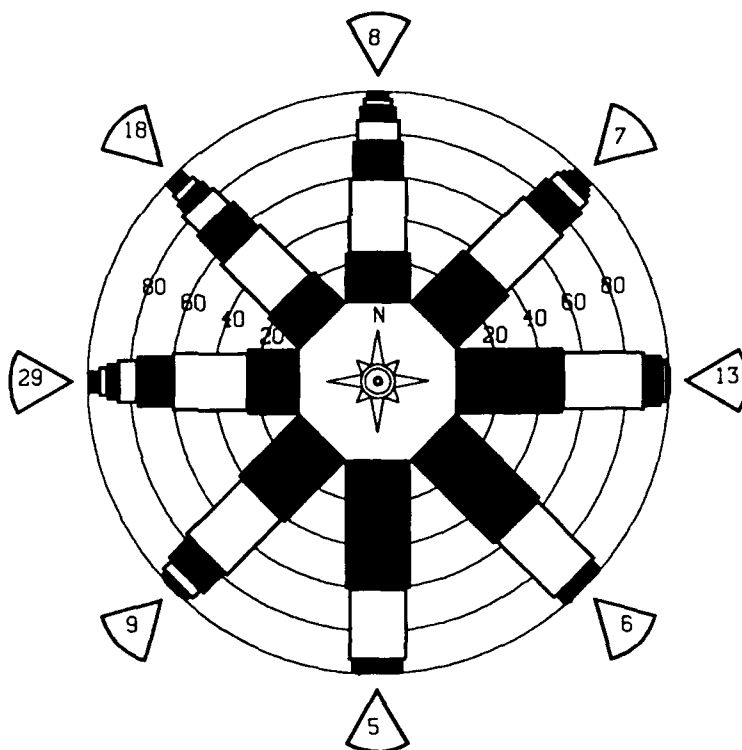
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	904	1878	536	41	2	.	.	.	.	.	3361
0.50-0.99	.	1430	1912	213	37	6	.	.	.	.	3598
1.00-1.49	.	.	724	559	53	24	2	.	.	.	1362
1.50-1.99	.	.	86	400	206	30	5	2	.	.	729
2.00-2.49	.	.	2	149	116	79	5	2	.	.	353
2.50-2.99	.	.	.	6	169	71	7	1	.	.	254
3.00-3.49	13	128	12	2	.	.	155
3.50-3.99	58	24	3	.	.	85
4.00-4.49	5	30	5	.	.	40
4.50-4.99	6	11	1	.	18
5.00-5.49	9	.	.	9
5.50-5.99	2	2	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	904	3308	3260	1368	596	401	91	37	4	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.

STATION 32
47.23N, 88.78 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S32 (47.23N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	1.1	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.1	1.4	1.3	0.9
1957	1.5	1.3	0.0	0.9	0.9	0.7	0.6	0.6	0.8	0.7	1.3	1.2	1.0
1958	0.8	1.4	0.5	0.9	0.8	0.7	0.6	0.6	0.8	1.0	1.4	1.1	0.9
1959	1.1	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.8	0.8	0.8	1.3	0.9
1960	1.3	1.2	0.9	1.0	0.8	0.5	0.5	0.6	0.8	1.0	1.4	1.3	0.9
1961	1.0	1.0	1.2	0.9	0.8	0.7	0.5	0.5	0.8	0.9	1.0	1.2	0.9
1962	1.5	0.9	0.7	0.8	0.6	0.4	0.4	0.4	0.5	0.8	0.7	1.1	0.8
1963	1.3	1.2	1.0	0.7	0.6	0.5	0.5	0.5	0.6	0.7	1.1	1.2	0.8
1964	1.2	1.0	1.2	0.9	0.7	0.6	0.5	0.7	0.8	1.0	1.2	1.0	0.9
1965	1.5	1.5	0.9	0.7	0.6	0.5	0.5	0.4	0.7	1.2	1.7	1.5	1.0
1966	1.7	1.5	1.7	1.1	1.2	0.6	0.6	0.6	1.0	1.6	1.5	1.5	1.2
1967	1.5	1.5	1.3	1.0	0.9	0.6	0.7	0.7	0.8	1.5	1.5	1.8	1.1
1968	1.2	2.4	1.5	1.1	0.7	0.6	0.7	0.7	0.7	1.2	1.7	1.7	1.2
1969	1.5	0.9	1.1	0.8	0.7	0.5	0.4	0.6	0.7	1.1	1.1	0.9	0.9
1970	1.1	1.3	0.9	0.9	0.8	0.5	0.5	0.6	0.8	0.8	1.2	1.1	0.9
1971	1.4	1.2	1.1	1.0	0.9	0.7	0.4	0.5	0.6	0.9	1.1	1.1	0.9
1972	1.6	1.1	1.0	0.7	0.4	0.5	0.4	0.4	0.7	1.1	0.8	1.1	0.8
1973	1.2	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.1	1.1	0.9
1974	1.0	0.8	1.1	0.7	0.7	0.7	0.6	0.6	0.8	0.9	1.1	1.1	0.9
1975	1.1	1.1	1.2	0.7	0.4	0.5	0.5	0.5	0.7	0.9	1.1	1.2	0.8
1976	1.2	1.3	1.3	0.8	0.6	0.5	0.3	0.6	0.6	0.5	0.9	1.1	0.9
1977	1.5	1.5	1.3	0.6	0.5	0.5	0.5	0.5	0.7	0.9	0.9	1.1	0.9
1978	1.4	1.1	0.9	0.9	0.5	0.5	0.5	0.5	0.8	0.8	1.1	1.2	0.9
1979	1.1	1.0	0.7	0.7	0.5	0.5	0.4	0.5	0.7	0.7	1.1	1.1	0.9
1980	1.1	0.9	1.1	0.7	0.6	0.6	0.4	0.5	0.9	1.2	1.1	1.3	0.9
1981	1.2	1.1	1.1	0.8	0.5	0.6	0.4	0.5	0.8	0.9	1.1	1.1	0.9
1982	1.7	1.3	1.4	1.0	0.6	0.6	0.5	0.5	0.7	0.9	1.1	1.1	1.1
1983	1.0	1.1	1.1	0.7	0.7	0.5	0.5	0.5	0.7	0.9	1.1	1.1	1.1
1984	1.1	0.9	1.1	0.8	0.7	0.6	0.5	0.4	0.8	0.8	1.1	1.1	1.1
1985	1.5	1.3	1.3	0.8	0.6	0.7	0.4	0.4	0.7	0.7	1.1	1.1	1.1
1986	1.2	0.8	1.1	1.0	0.6	0.6	0.4	0.4	0.5	0.8	1.2	1.0	0.9
1987	1.0	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.5	0.9	1.1	0.9	0.7
MEAN	1.3	1.2	1.1	0.8	0.7	0.6	0.5	0.5	0.7	0.9	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S32 (47.23N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1957	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1958	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1959	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1960	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1961	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1962	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1963	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1964	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1965	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1966	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1967	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1968	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1969	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1970	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1971	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1972	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1973	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1974	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1975	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1976	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1977	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1978	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1979	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1980	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1981	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1982	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1983	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1984	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1985	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1986	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	
1987	3.0	3.9	3.2	4.1	2.6	2.6	1.6	1.8	2.8	4.3	4.7	4.5	

32 YR. STATISTICS FOR WIS STATION S32

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	8.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	269.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	228	547	202	6	13	2	.	.	.	.	983
0.50-0.99	.	387	1089	165	75	7	.	.	.	.	1656
1.00-1.49	.	.	421	260	75	41	.	.	.	.	763
1.50-1.99	.	.	29	336	43	34	.	.	.	.	449
2.00-2.49	.	.	.	161	79	10	1	.	.	.	275
2.50-2.99	.	.	.	7	145	53	33	.	.	.	165
3.00-3.49	51	40	3	.	1	.	107
3.50-3.99	4	3	.	.	.	50
4.00-4.49	1	1	.	.	8
4.50-4.99	1	.	.	3
5.00-5.49	1	.	1
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	228	934	1741	935	406	191	16	10	4	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 4191.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	171	416	164	3	1	1	.	.	.	.	756
0.50-0.99	.	324	702	127	9	.	.	.	.	.	1162
1.00-1.49	.	.	197	208	50	10	.	.	.	.	465
1.50-1.99	.	.	18	120	58	33	.	.	.	.	229
2.00-2.49	.	.	.	47	33	32	6	.	.	.	118
2.50-2.99	54	24	3	.	.	.	81
3.00-3.49	3	22	13	.	.	.	38
3.50-3.99	11	10	5	.	.	26
4.00-4.49	1	5	7	1	.	14
4.50-4.99	3	4	1	.	8
5.00-5.49	8	2	.	10
5.50-5.99	1	5	.	6
6.00-6.49	3	.	3
6.50-6.99	0
7.00+	0
TOTAL	171	740	1081	505	208	134	40	25	12	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 2741.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	322	727	347	12	13	1	.	.	.	.	1408
0.50-0.99	.	413	973	253	13	1	.	.	.	.	1653
1.00-1.49	.	.	280	311	59	10	.	.	.	.	660
1.50-1.99	.	.	21	155	71	42	1	.	.	.	290
2.00-2.49	.	.	.	56	38	31	9	.	.	.	134
2.50-2.99	48	40	8	.	.	.	101
3.00-3.49	4	35	7	.	.	.	52
3.50-3.99	20	12	2	.	.	34
4.00-4.49	5	2	.	.	11
4.50-4.99	1	2	3	.	6
5.00-5.49	2	.	.	8
5.50-5.99	2	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	322	1140	1621	787	233	179	44	23	10	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 4092.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	621	1051	515	17	1	.	.	.	.	.	2205
0.50-0.99	.	932	578	304	33	4	.	.	.	.	1849
1.00-1.49	.	.	149	127	75	26	2	.	.	.	379
1.50-1.99	.	.	44	44	45	74	9	1	.	.	194
2.00-2.49	.	.	21	17	10	37	18	9	.	.	92
2.50-2.99	10	8	9	7	3	.	37
3.00-3.49	1	5	4	11	3	.	24
3.50-3.99	3	1	2	1	1	8
4.00-4.49	5	3	2	.	10
4.50-4.99	1	2	.	3
5.00-5.49	2	.	.	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	621	1983	1262	509	175	157	48	36	12	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4509.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1104	1864	782	58	8	3	.	.	.	.	3819
0.50-0.99	.	2169	412	337	110	19	.	.	.	.	3047
1.00-1.49	.	.	345	84	115	85	5	.	.	.	634
1.50-1.99	.	.	59	2	48	89	25	11	.	.	234
2.00-2.49	.	.	9	1	2	27	35	25	4	.	103
2.50-2.99	4	12	8	.	24
3.00-3.49	5	.	5
3.50-3.99	1	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1104	4033	1607	482	283	223	69	48	17	1	7372

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 7372.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	728	1100	371	33	4	1	.	.	.	.	2237
0.50-0.99	.	1375	253	111	28	10	.	1	.	.	1778
1.00-1.49	.	.	251	16	16	19	6	.	.	.	308
1.50-1.99	.	.	66	6	3	19	8	6	1	.	109
2.00-2.49	.	.	6	1	.	2	1	1	.	1	12
2.50-2.99	.	.	.	2	.	.	1	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	728	2475	947	169	51	51	16	8	1	1	4166

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 4166.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	690	978	297	17	3	.	.	.	.	.	1985
0.50-0.99	.	1058	202	28	11	2	.	1	.	.	1302
1.00-1.49	.	.	164	2	2	4	1	.	.	.	173
1.50-1.99	.	.	38	2	.	3	.	.	.	.	43
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	690	2036	701	49	16	9	1	1	0	0	3282

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 3282.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	536	788	140	7	3	.	.	.	.	.	1474
0.50-0.99	.	816	151	9	10	1	.	.	.	.	987
1.00-1.49	.	.	127	3	3	.	.	.	.	.	133
1.50-1.99	.	.	24	4	.	.	1	.	.	.	29
2.00-2.49	.	.	.	2	.	.	.	1	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	536	1604	442	22	16	4	1	1	0	0	2461

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2461.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	590	849	182	23	1						1645
0.50-0.99		714	90	21		2					830
1.00-1.49			136		3	1					140
1.50-1.99			18								18
2.00-2.49			1								1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	590	1563	427	44	7	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2468.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	514	1058	172	19		1					1764
0.50-0.99		1033	220	24	9						1305
1.00-1.49			269	7	2	2					280
1.50-1.99			50	23	1	2					76
2.00-2.49				12							12
2.50-2.99				2	1						3
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	514	2111	711	87	13	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 3224.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	458	1063	473	18	1	2					2015
0.50-0.99		868	1003	127	12						2010
1.00-1.49			487	122	21	5					635
1.50-1.99			68	195	24	2					289
2.00-2.49				85	12	2					99
2.50-2.99				5	50	4					59
3.00-3.49					5	1					6
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	458	1931	2031	552	125	16	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 4791.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	479	1418	793	45							2735
0.50-0.99		787	2171	408	16						3382
1.00-1.49			864	465	71	5					1405
1.50-1.99			77	467	178	20					742
2.00-2.49				191	98	73					362
2.50-2.99				6	161	57	1	1			226
3.00-3.49					16	70	10				96
3.50-3.99					1	27	20	3			51
4.00-4.49						7	11	8			26
4.50-4.99						2		2			4
5.00-5.49											0
5.50-5.99								1			1
6.00-6.49											0
6.50-6.99											0
7.00+											1
TOTAL	479	2205	3905	1582	541	261	42	15	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 8457.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	620	2547	635	5							3807
0.50-0.99		1059	4913	499	14						6485
1.00-1.49			1149	1630	137	3					2919
1.50-1.99			95	852	582	75					1604
2.00-2.49				321	231	325	5				882
2.50-2.99				6	395	201	68				674
3.00-3.49					29	284	69	19			401
3.50-3.99						139	111	16	1		267
4.00-4.49						12	99	53	1		165
4.50-4.99							18	71	4		93
5.00-5.49							2	39	8		49
5.50-5.99								8	2		36
6.00-6.49								1			9
6.50-6.99									2		2
7.00+										3	3
TOTAL	620	3606	6792	3313	1388	1039	372	211	52	3	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 16286.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	518	2173	450	10	1						3152
0.50-0.99		859	4028	255	10						5152
1.00-1.49			990	1442	70	6					2508
1.50-1.99			79	828	568	37					1512
2.00-2.49				339	401	251	1				992
2.50-2.99				4	498	270	23	1			796
3.00-3.49					23	340	40	15			408
3.50-3.99						163	73	13	1		250
4.00-4.49						10	87	29			126
4.50-4.99						2	24	36	2		64
5.00-5.49							1	33	7		41
5.50-5.99								6	9		15
6.00-6.49								1	7		8
6.50-6.99									3		3
7.00+									1	2	3
TOTAL	518	3032	5547	2878	1571	1079	249	124	30	2	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 14074.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	322	1044	313	7							1686
0.50-0.99		572	2014	129	19						2734
1.00-1.49			773	486	24	9					1292
1.50-1.99			60	675	141	11					887
2.00-2.49				313	199	20					532
2.50-2.99				3	255	68					326
3.00-3.49					49	69					118
3.50-3.99					1	33					36
4.00-4.49						5	2				14
4.50-4.99							8	1			3
5.00-5.49							2	1			1
5.50-5.99								1			0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	322	1616	3160	1613	688	215	12	3	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 7147.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

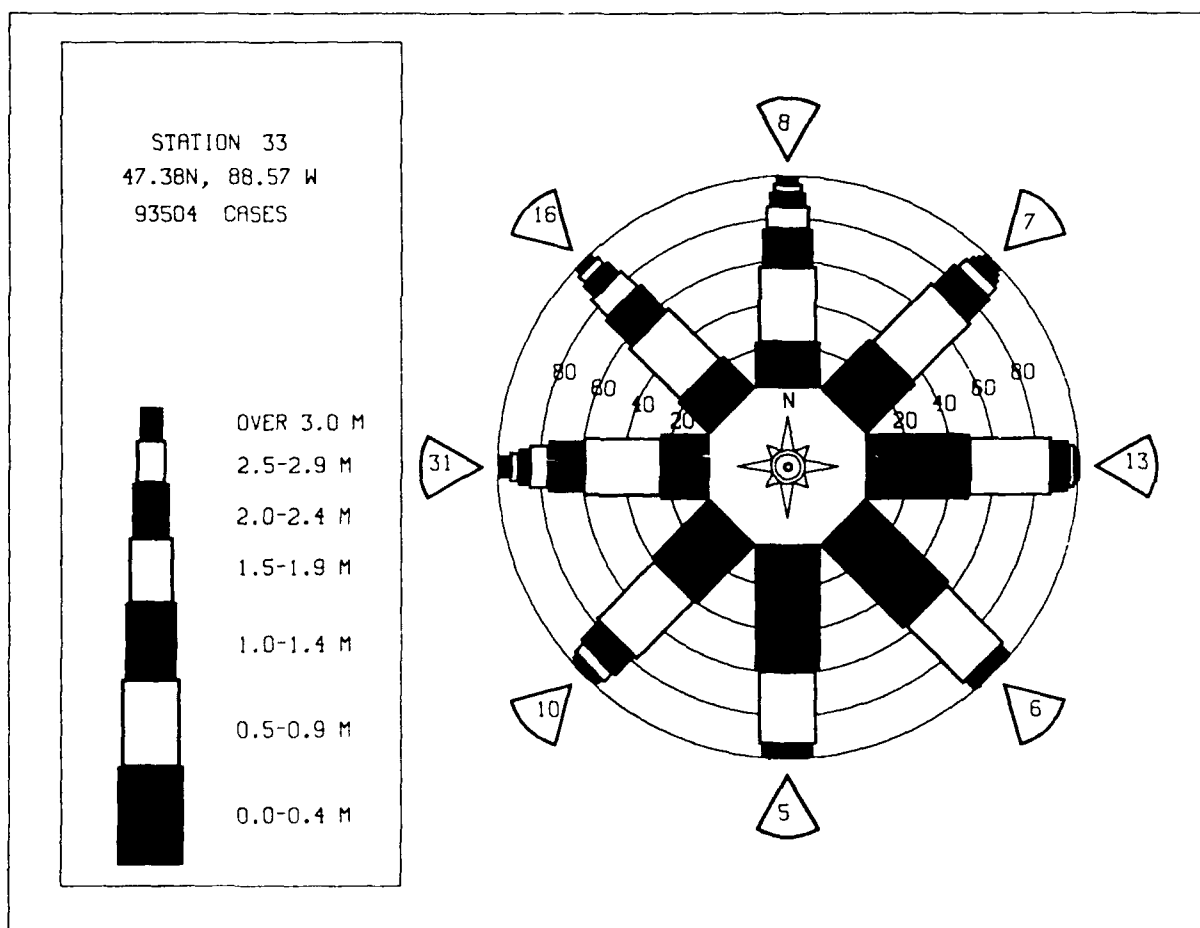
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	177	433	179	5	1						795
0.50-0.99		324	999	136	13						1472
1.00-1.49			546	287	40	9					882
1.50-1.99			36	505	56	9					606
2.00-2.49				250	112	6	1				369
2.50-2.99				11	227	13					251
3.00-3.49					63	49	1				113
3.50-3.99					1	26	1				28
4.00-4.49						6					6
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	177	757	1760	1194	513	118	4	0	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 4243.

STATION S33 47.38N 88.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	808	1806	602	29	2	.	.	.	.	.	3247
0.50-0.99	.	1371	1980	294	33	4	.	.	.	.	3682
1.00-1.49	.	.	715	545	77	21	.	.	.	.	1359
1.50-1.99	.	.	76	422	182	46	1	.	.	.	731
2.00-2.49	.	.	1	180	121	84	7	1	.	.	396
2.50-2.99	.	.	.	4	184	70	12	3	1	.	274
3.00-3.49	24	93	14	4	.	.	135
3.50-3.99	46	23	4	.	.	73
4.00-4.49	22	11	.	.	37
4.50-4.99	5	12	1	.	18
5.00-5.49	8	2	.	10
5.50-5.99	1	.	.	5
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	0
TOTAL	808	3177	3374	1474	623	368	88	47	10	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S33 (47.38N 88.57W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.2	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.1	1.4	1.3	0.9
1957	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1958	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1959	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1960	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1961	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1962	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1963	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1964	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1965	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1966	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1967	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1968	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1969	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1970	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1971	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1972	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1973	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1974	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1975	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1976	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1977	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1978	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1979	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1980	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1981	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1982	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1983	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1984	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1985	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1986	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
1987	0.5	1.1	1.1	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.0
MEAN	1.3	1.2	1.1	0.8	0.7	0.6	0.5	0.5	0.7	1.0	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S33 (47.38N 88.57W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.1	3.3	3.3	4.1	2.7	2.1	1.1	1.8	2.8	4.3	4.5	4.5
1957	4.0	3.3	3.3	3.3	2.8	2.1	1.1	1.8	2.8	4.3	4.5	4.5
1958	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1959	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1960	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1961	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1962	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1963	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1964	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1965	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1966	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1967	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1968	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1969	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1970	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1971	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1972	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1973	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1974	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1975	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1976	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1977	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1978	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1979	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1980	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1981	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1982	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1983	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1984	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1985	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1986	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5
1987	3.3	3.3	3.3	3.3	3.1	1.1	1.1	1.8	2.8	4.3	4.5	4.5

32 YR. STATISTICS FOR WIS STATION S33

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	8.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	266.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	455	177	11		1					796
0.50-0.99		280	1152	149	12	3					1596
1.00-1.49			375	331	73	2					781
1.50-1.99			31	320	86	33					470
2.00-2.49				139	77	69	1				286
2.50-2.99				6	155	32	3				196
3.00-3.49					50	49	7				106
3.50-3.99					3	40	10				53
4.00-4.49						10	3				15
4.50-4.99							1	2			5
5.00-5.49							1				1
5.50-5.99									1		1
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	152	735	1735	956	456	239	26	6	2	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 4041.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	121	341	111	6							579
0.50-0.99		274	817	110	5						1206
1.00-1.49			225	276	36	2					539
1.50-1.99			11	122	94	18					245
2.00-2.49				44	54	49					147
2.50-2.99					50	49	6				105
3.00-3.49					6	34	3	2			45
3.50-3.99						17	10	4			31
4.00-4.49						2	13	3			18
4.50-4.99							2	10			12
5.00-5.49							1	3			4
5.50-5.99								2	3		5
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	121	615	1164	558	245	171	35	24	3	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 2759.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	196	628	193	17							1034
0.50-0.99		312	1222	162	14						1710
1.00-1.49			275	439	33						770
1.50-1.99			13	171	142	12					338
2.00-2.49				49	48	50					147
2.50-2.99					57	42	2				101
3.00-3.49					2	60	14				78
3.50-3.99						21	20	2			45
4.00-4.49							5	8			14
4.50-4.99							2	7			9
5.00-5.49								6	2		8
5.50-5.99								2	1		3
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	196	940	1703	858	296	188	44	29	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 3996.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	308	788	162	14							1272
0.50-0.99		439	1438	121	8	2					2008
1.00-1.49			370	397	26						794
1.50-1.99			23	181	78	11					303
2.00-2.49				57	43	34	2				136
2.50-2.99					72	28	5				105
3.00-3.49					4	57	4	5			70
3.50-3.99						39	14	3			56
4.00-4.49						3	14	7	1		25
4.50-4.99							4	21	1		26
5.00-5.49								7			7
5.50-5.99								3	2		5
6.00-6.49									1		1
6.50-6.99									2		2
7.00+										1	1
TOTAL	308	1228	1993	780	231	174	43	46	7	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4516.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	565	1453	320	26	5	.	.	.	.	.	2369
0.50-0.99	.	805	2274	129	24	.	.	.	.	.	3232
1.00-1.49	.	.	777	625	40	9	1	.	.	.	1452
1.50-1.99	.	.	32	387	119	14	.	.	.	.	552
2.00-2.49	.	.	.	114	80	35	1	.	.	.	230
2.50-2.99	140	43	2	.	.	.	185
3.00-3.49	5	101	5	.	.	.	111
3.50-3.99	57	14	.	.	.	71
4.00-4.49	4	47	.	.	.	59
4.50-4.99	11	22	.	.	33
5.00-5.49	13	.	.	13
5.50-5.99	5	6	.	11
6.00-6.49	4	.	4
6.50-6.99	2	.	2
7.00+	1	.	1
TOTAL	565	2258	3403	1281	413	263	81	48	15	1	7805

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 7805.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	444	1034	236	34	2	.	.	.	.	.	1750
0.50-0.99	.	783	1020	119	29	6	1	.	.	.	1958
1.00-1.49	.	.	311	159	34	19	2	.	.	.	525
1.50-1.99	.	.	47	89	41	20	1	.	.	.	198
2.00-2.49	.	.	1	42	16	17	7	.	.	.	83
2.50-2.99	.	.	.	1	22	9	3	.	.	.	35
3.00-3.49	3	17	3	.	.	.	23
3.50-3.99	6	3	2	.	.	11
4.00-4.49	1	4	3	.	.	8
4.50-4.99	3	3	1	.	7
5.00-5.49	1	1	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	2	2
7.00+	1	.	1
TOTAL	444	1817	1615	444	147	95	27	10	3	2	4318

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4318.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	482	1089	279	78	18	8	.	.	.	.	1954
0.50-0.99	.	1055	453	141	55	33	4	.	.	.	1741
1.00-1.49	.	.	179	49	44	25	1	.	.	.	298
1.50-1.99	.	.	48	8	12	14	7	2	.	.	91
2.00-2.49	.	.	.	3	3	6	4	.	.	.	16
2.50-2.99	4	4	.	.	8
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	482	2144	959	279	132	86	20	6	0	0	3852

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 3852.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	464	920	222	55	17	4	.	.	.	.	1682
0.50-0.99	.	819	254	69	31	23	7	.	.	.	1203
1.00-1.49	.	.	117	16	18	13	3	.	.	.	167
1.50-1.99	.	.	19	1	3	6	6	1	.	.	36
2.00-2.49	.	.	.	1	.	.	2	.	.	.	3
2.50-2.99	1	1	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	464	1739	612	142	69	46	19	2	0	0	2900

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 2900.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	412	865	274	64	8	4	.	.	.	.	1627
0.50-0.99	.	706	219	81	22	28	7	.	.	.	1056
1.00-1.49	.	.	113	12	22	14	7	.	.	.	168
1.50-1.99	.	.	16	.	1	3	4	.	.	.	24
2.00-2.49	1	2	.	.	.	2
2.50-2.99	1	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	412	1571	622	157	53	50	14	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 2701.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	309	770	306	32	3	1	.	.	.	.	1421
0.50-0.99	.	802	378	73	29	18	.	.	.	.	1300
1.00-1.49	.	.	222	36	11	10	1	.	.	.	280
1.50-1.99	.	.	52	18	2	2	1	.	.	.	75
2.00-2.49	.	.	2	11	2	2	.	.	.	.	15
2.50-2.99	.	.	.	1	4	.	.	1	.	.	6
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	309	1572	960	171	49	33	2	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 2904.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	279	874	530	55	5	3	.	.	.	.	1746
0.50-0.99	.	735	1132	234	32	5	.	.	.	.	2138
1.00-1.49	.	.	416	210	41	9	.	.	.	.	676
1.50-1.99	.	.	63	182	34	9	1	.	.	.	289
2.00-2.49	.	.	.	80	32	7	.	.	.	.	119
2.50-2.99	.	.	.	5	50	2	.	.	.	.	57
3.00-3.49	8	9	1	.	.	.	18
3.50-3.99	4	.	.	.	.	4
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	279	1609	2141	766	202	48	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 4730.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	302	1449	821	44	5	.	1	.	.	.	2621
0.50-0.99	.	756	2821	620	23	3	.	.	.	.	4224
1.00-1.49	.	.	731	672	114	4	1	.	.	.	1522
1.50-1.99	.	.	65	432	199	48	.	.	.	.	744
2.00-2.49	.	.	.	165	99	86	3	.	.	.	353
2.50-2.99	.	.	.	8	157	69	8	1	.	.	243
3.00-3.49	22	81	5	1	.	.	109
3.50-3.99	34	33	3	.	.	70
4.00-4.49	9	16	9	1	.	35
4.50-4.99	3	10	.	.	13
5.00-5.49	4	1	.	5
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	1	.	1
7.00+	0
TOTAL	302	2205	4438	1941	619	334	70	29	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 9310.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	434	2313	688	12	7	.	.	.	.	.	3447
0.50-0.99	.	967	5294	618	18	7	.	.	.	.	6904
1.00-1.49	.	.	1076	1835	237	3	.	.	.	.	3151
1.50-1.99	.	.	109	830	630	110	.	.	.	.	1679
2.00-2.49	.	.	.	332	265	383	12	.	.	.	992
2.50-2.99	.	.	.	4	389	260	64	3	.	.	720
3.00-3.49	18	281	89	10	2	.	400
3.50-3.99	152	136	26	2	.	316
4.00-4.49	13	110	50	1	.	174
4.50-4.99	24	70	5	1	100
5.00-5.49	1	62	7	.	70
5.50-5.99	5	20	.	25
6.00-6.49	8	.	8
6.50-6.99	4	.	4
7.00+	5	5
TOTAL	434	3280	7167	3631	1557	1209	436	226	49	6	

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 16848.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	364	1682	371	13	2	.	.	.	.	.	2432
0.50-0.99	.	804	3383	280	29	2	.	.	.	.	4498
1.00-1.49	.	.	1004	1059	78	10	.	.	.	.	2151
1.50-1.99	.	.	82	885	361	31	.	.	.	.	1359
2.00-2.49	.	.	.	371	350	161	.	.	.	.	882
2.50-2.99	.	.	.	4	416	146	14	.	.	.	580
3.00-3.49	55	183	33	3	.	.	274
3.50-3.99	87	55	7	.	.	149
4.00-4.49	13	68	24	.	.	105
4.50-4.99	1	13	29	.	.	43
5.00-5.49	5	21	8	.	34
5.50-5.99	4	10	.	14
6.00-6.49	1	7	1	9
6.50-6.99	3	.	3
7.00+	1	2	2
TOTAL	364	2486	4840	2612	1291	634	188	89	29	2	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 11741.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	228	903	287	11	1	.	.	.	.	.	1430
0.50-0.99	.	474	1942	179	16	2	.	.	.	.	2613
1.00-1.49	.	1	772	343	44	2	.	.	.	.	1362
1.50-1.99	.	.	63	752	49	13	.	.	.	.	877
2.00-2.49	.	.	1	365	194	7	.	.	.	.	567
2.50-2.99	.	.	.	3	250	34	.	.	.	.	260
3.00-3.49	47	19	2	.	.	.	83
3.50-3.99	4	1	.	.	.	20
4.00-4.49	2	.	.	.	4
4.50-4.99	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	228	1378	3065	1853	601	88	5	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6761.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

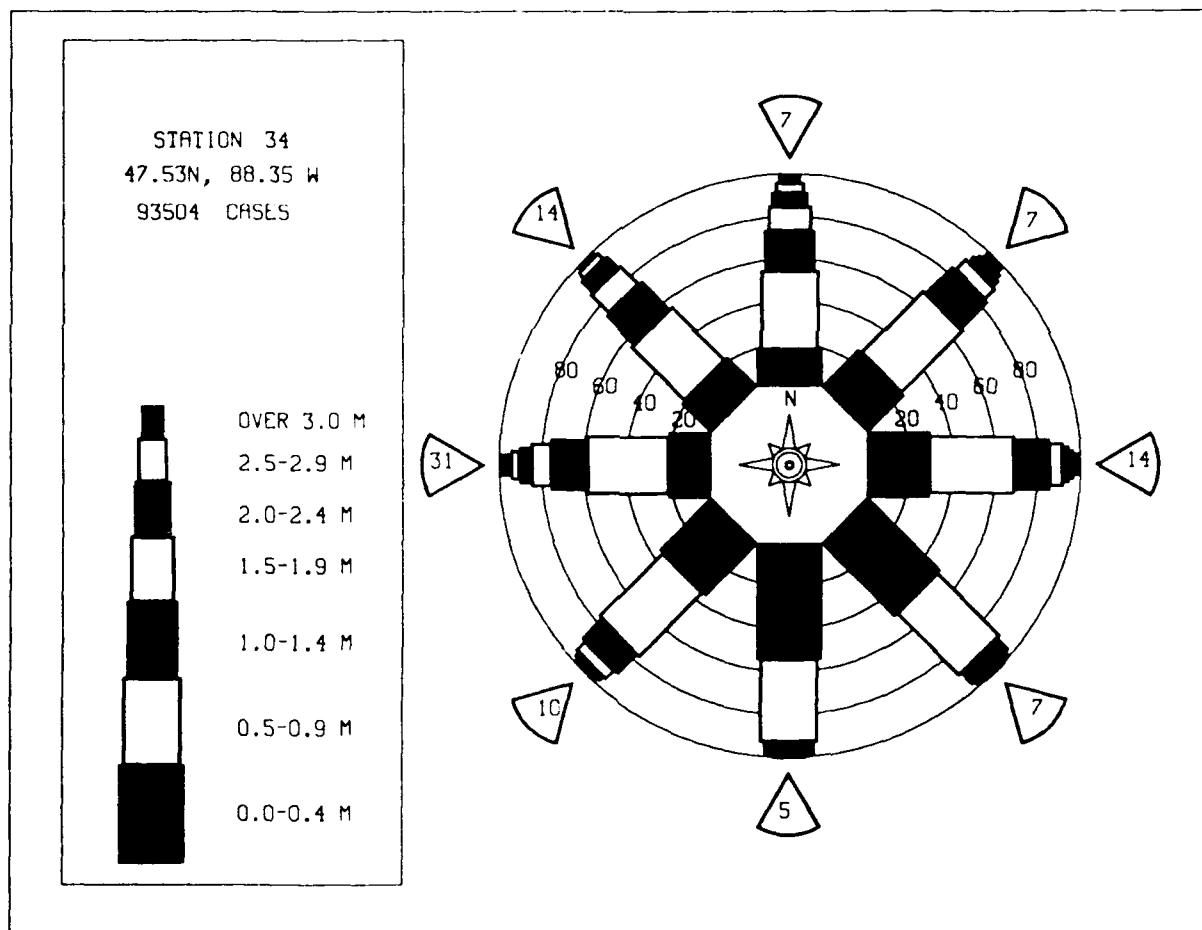
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	104	385	143	11	1	.	.	.	.	.	644
0.50-0.99	.	290	1218	113	5	1	.	.	.	.	1627
1.00-1.49	.	1	555	301	58	7	1	.	.	.	924
1.50-1.99	.	.	47	540	47	22	1	.	.	.	656
2.00-2.49	.	.	.	254	111	17	.	.	.	.	382
2.50-2.99	.	.	.	5	229	8	1	.	.	.	243
3.00-3.49	53	43	3	.	.	.	99
3.50-3.99	2	22	1	.	.	.	25
4.00-4.49	8	1	.	.	.	9
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	104	676	1963	1224	507	128	8	0	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 4322.

STATION S34 47.53N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	517	1595	512	49	6	2					2681
0.50-0.99		1030	2502	320	36	13	1				3902
1.00-1.49			752	698	91	13	1				1555
1.50-1.99			72	493	190	37	2				794
2.00-2.49				203	137	92	3				435
2.50-2.99				3	199	70	11	1			284
3.00-3.49					27	95	17	2			141
3.50-3.99						50	30	5			85
4.00-4.49						7	28	11			46
4.50-4.99							6	18			24
5.00-5.49								11	2		13
5.50-5.99								2	4		6
6.00-6.49									2		2
6.50-6.99									1		1
7.00+											0
TOTAL	517	2625	3838	1766	686	379	99	50	9	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S34 (47.53N 88.35W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.8	1.2	1.3	1.2	0.9	0.7	0.7	0.6	0.7	1.2	1.4	1.4	1.0
1957	0.8	1.3	1.1	1.0	1.0	0.7	0.6	0.6	0.8	1.1	1.3	1.2	1.0
1958	0.8	1.3	1.1	1.1	1.0	0.9	0.7	0.6	0.8	1.1	1.3	1.1	1.0
1959	1.1	1.1	1.0	0.9	0.9	0.6	0.5	0.5	0.8	1.0	1.4	1.6	0.9
1960	1.1	1.2	1.1	1.0	0.9	0.5	0.5	0.6	0.8	1.0	1.5	1.2	0.9
1961	1.1	1.1	1.1	1.0	0.8	0.7	0.5	0.4	0.4	0.9	1.0	1.2	0.9
1962	1.1	1.0	1.0	0.9	0.7	0.5	0.5	0.4	0.6	0.8	0.8	1.1	1.1
1963	1.2	1.2	1.1	0.8	0.7	0.5	0.5	0.6	0.7	0.8	1.1	1.3	0.9
1964	1.3	1.1	1.3	1.1	0.8	0.6	0.6	0.8	0.9	1.0	1.2	1.1	1.0
1965	1.6	1.6	1.1	0.8	0.7	0.6	0.5	0.5	0.8	1.2	1.8	1.6	1.1
1966	1.7	1.7	2.0	1.3	1.3	0.7	0.7	0.7	1.1	1.7	1.6	1.6	1.3
1967	1.7	1.6	1.5	1.2	1.1	0.8	0.7	0.8	0.9	1.7	1.5	2.1	1.3
1968	1.4	2.4	1.7	1.3	0.9	0.7	0.8	0.8	0.8	1.3	1.9	1.8	1.3
1969	1.6	1.0	1.3	0.9	0.7	0.6	0.4	0.7	0.8	1.2	1.3	1.0	1.0
1970	1.1	1.3	1.1	1.1	0.9	0.5	0.6	0.6	0.9	1.0	1.3	1.1	0.9
1971	1.4	1.4	1.2	1.0	0.8	0.5	0.6	0.5	0.7	1.1	1.3	1.2	1.0
1972	1.6	1.2	1.3	0.8	0.5	0.5	0.4	0.5	0.8	1.1	1.0	1.2	0.9
1973	1.3	1.1	1.2	1.0	0.9	0.6	0.6	0.4	0.8	1.0	1.3	1.1	0.9
1974	1.1	0.8	1.2	0.9	0.8	0.7	0.6	0.7	0.8	0.9	1.2	1.1	0.9
1975	1.2	1.2	1.3	0.8	0.5	0.5	0.5	0.6	0.7	1.0	1.3	1.0	0.9
1976	1.3	1.3	1.4	0.9	0.7	0.6	0.4	0.6	0.7	1.0	1.0	1.1	0.9
1977	1.5	1.6	1.6	0.7	0.6	0.5	0.5	0.5	0.8	0.9	1.0	1.4	1.0
1978	1.3	1.0	1.0	1.1	0.6	0.5	0.5	0.6	1.0	0.8	1.2	1.3	0.9
1979	1.2	0.9	1.2	0.9	0.7	0.6	0.5	0.6	0.7	0.8	1.1	1.2	0.8
1980	1.2	0.9	1.1	0.8	0.7	0.6	0.4	0.6	0.9	1.1	1.0	1.3	0.9
1981	1.1	1.1	1.1	0.9	0.6	0.6	0.4	0.5	0.9	1.1	1.1	0.9	0.8
1982	1.7	1.3	1.6	1.0	0.8	0.6	0.5	0.5	0.8	1.0	1.2	1.3	1.0
1983	1.1	0.9	1.5	0.9	0.8	0.5	0.5	0.4	0.8	0.9	1.5	1.5	0.9
1984	1.1	1.1	1.2	1.0	0.7	0.6	0.5	0.4	0.7	1.0	1.3	1.5	0.9
1985	1.4	1.2	1.6	0.9	0.7	0.7	0.4	0.5	0.6	0.8	1.1	1.4	0.9
1986	1.3	0.9	1.3	1.2	0.6	0.6	0.5	0.5	0.8	1.0	1.2	1.1	0.9
1987	1.0	1.1	1.3	0.7	0.6	0.5	0.5	0.6	0.6	1.0	1.2	1.0	0.8
MEAN	1.3	1.2	1.2	1.0	0.8	0.6	0.5	0.6	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S34 (47.53N 88.35W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.6	4.3	7.2	4.1	3.0	1.9	1.5	1.9	2.8	2.6	4.3	5.2	
1957	3.3	4.3	3.9	4.4	3.2	2.2	2.5	2.2	2.2	2.2	4.3	5.2	
1958	3.3	3.3	2.7	5.0	3.0	1.8	2.2	2.2	2.2	2.2	4.3	5.2	
1959	3.3	3.3	3.3	4.8	3.3	1.7	2.2	2.2	2.2	2.2	4.3	5.2	
1960	3.3	3.3	3.3	3.7	3.3	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1961	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1962	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1963	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1964	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1965	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1966	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1967	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1968	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1969	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1970	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1971	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1972	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1973	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1974	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1975	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1976	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1977	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1978	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1979	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1980	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1981	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1982	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1983	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1984	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1985	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1986	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	
1987	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	4.3	5.2	

32 YR. STATISTICS FOR WIS STATION S34

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . .	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	8.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .	(DEGREES)	264.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		82031400

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	140	454	174	14							782
0.50-0.99		262	1178	144	14	4					1602
1.00-1.49			343	463	56	1					863
1.50-1.99			27	247	170	24					468
2.00-2.49				98	95	86					279
2.50-2.99				1	125	59	1				186
3.00-3.49					6	125					131
3.50-3.99						86					105
4.00-4.49						7	19				22
4.50-4.99							45	1			53
5.00-5.49							13	9			22
5.50-5.99							1	3			4
6.00-6.49								1			1
6.50-6.99									1		0
7.00+											0
TOTAL	140	716	1722	967	466	392	79	14	2	0	
MEAN HS(M) = 1.2	LARGEST HS(M)= 6.1		MEAN TP(SEC)= 4.9		NO. OF CASES= 4219.						

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	120	342	120	10							592
0.50-0.99		242	891	104	3						1240
1.00-1.49			217	322	42	3					584
1.50-1.99			7	124	120	11					262
2.00-2.49				36	57	55					148
2.50-2.99				1	55	40	3				99
3.00-3.49					5	43	4	2			54
3.50-3.99						23	12	2			37
4.00-4.49						3	16	2			21
4.50-4.99							6	10			16
5.00-5.49								3			3
5.50-5.99									1		1
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	120	584	1235	597	282	178	41	19	2	0	
MEAN HS(M) = 1.1	LARGEST HS(M)= 6.1		MEAN TP(SEC)= 4.7		NO. OF CASES= 2876.						

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	176	579	206	10	.	.	.	.	.	.	971
0.50-0.99	.	308	1309	147	10	.	.	.	.	.	1774
1.00-1.49	.	.	294	472	31	2	.	.	.	.	799
1.50-1.99	.	.	12	183	144	11	.	.	.	.	350
2.00-2.49	.	.	.	53	60	52	.	.	.	.	165
2.50-2.99	.	.	.	1	51	36	6	.	.	.	94
3.00-3.49	2	58	17	1	.	.	78
3.50-3.99	18	25	2	.	.	46
4.00-4.49	7	8	.	.	15
4.50-4.99	6	.	.	9
5.00-5.49	8	.	.	2
5.50-5.99	1	1	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	176	887	1821	866	298	177	56	26	2	0	
MEAN HS (M) = 1.0	LARGEST HS (M) = 5.6		MEAN TP (SEC) = 4.5		NO. OF CASES = 4043.						

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL	
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER		
0.00-0.49	263	749	186	7							1205	
0.50-0.99		391	1489	119	4	2	.	.	.	.	2005
1.00-1.49			342	373	21	2	.	.	.	.	738
1.50-1.99			21	175	83	6	.	.	.	.	285
2.00-2.49				45	38	26	.	.	.	.	109
2.50-2.99				1	77	20	6	.	.	.	104	
3.00-3.49					3	60	6	2	.	.	71	
3.50-3.99						29	14	3	.	.	46	
4.00-4.49							21	3	.	.	24	
4.50-4.99							7	14	.	.	21	
5.00-5.49								4	.	.	4	
5.50-5.99								1	.	.	2	
6.00-6.49									2	.	0	
6.50-6.99										.	0	
7.00+									1	.	1	
TOTAL	263	1140	2038	720	226	145	54	27	3	0		
MEAN HS(M) = 0.9	LARGEST HS(M)= 7.5										MEAN IP(SEC)= 4.3	NO. OF CASES= 4331.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	570	1382	317	25	25	1	.	.	.	.	2294
0.50-0.99	.	752	2233	121	50	18	.	.	.	.	3132
1.00-1.49	.	.	659	376	97	31	.	.	.	.	1278
1.50-1.99	.	.	31	98	84	16	.	.	.	.	520
2.00-2.49	117	32	.	.	.	.	213
2.50-2.99	6	91	.	.	.	.	149
3.00-3.49	45	.	2	.	.	103
3.50-3.99	3	12	1	.	.	58
4.00-4.49	39	7	.	.	49
4.50-4.99	11	13	.	.	24
5.00-5.49	14	2	.	16
5.50-5.99	1	3	.	6
6.00-6.49	2	.	3
6.50-6.99	4	.	4
7.00+	1	1
TOTAL	570	2134	3240	1181	379	227	66	41	11	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 7357.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	459	972	300	25	1	.	.	.	.	.	1757
0.50-0.99	.	709	1045	147	24	5	.	.	.	.	1930
1.00-1.49	.	.	250	199	45	18	1	.	.	.	513
1.50-1.99	.	.	24	117	34	21	2	.	.	.	198
2.00-2.49	.	.	3	18	27	14	7	1	.	.	70
2.50-2.99	.	.	.	2	21	16	.	.	.	.	39
3.00-3.49	4	13	2	.	.	.	19
3.50-3.99	9	5	1	.	.	15
4.00-4.49	9	1	.	.	10
4.50-4.99	1	1	.	.	2
5.00-5.49	1	1	1	.	2
5.50-5.99	1	1	.	.	2
6.00-6.49	1	.	1	1	1
6.50-6.99	1	1	1
7.00+	0
TOTAL	459	1681	1622	508	156	96	27	6	2	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4278.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	483	1107	379	135	41	8	.	.	.	.	2153
0.50-0.99	.	1118	502	221	114	42	3	.	.	.	2000
1.00-1.49	.	.	168	91	52	55	4	1	.	.	371
1.50-1.99	.	.	54	13	29	21	4	1	.	.	122
2.00-2.49	.	.	1	2	3	20	6	2	.	.	34
2.50-2.99	1	4	3	.	.	8
3.00-3.49	1	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	483	2225	1104	462	239	147	21	8	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 4399.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	517	1015	329	111	49	6	.	.	.	.	2027
0.50-0.99	.	981	269	113	66	57	9	1	.	.	1496
1.00-1.49	.	.	124	28	26	36	5	1	.	.	220
1.50-1.99	.	.	19	2	7	4	3	1	.	.	36
2.00-2.49	2	6	.	.	.	10
2.50-2.99	1	2	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	517	1996	741	256	148	105	24	5	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3556.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	443	890	356	62	12	2	1	.	.	.	1765
0.50-0.99	.	770	244	94	45	35	.	.	.	.	1189
1.00-1.49	.	.	154	10	16	23	.	.	.	.	208
1.50-1.99	.	.	27	.	3	6	.	.	.	.	41
2.00-2.49	.	.	1	1	.	1	2	.	.	.	4
2.50-2.99	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	443	1660	782	167	76	67	13	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3008.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	318	662	300	44	4	.	.	.	.	.	1328
0.50-0.99	.	741	253	84	33	12	.	.	.	.	1123
1.00-1.49	.	.	166	12	8	12	.	.	.	.	198
1.50-1.99	.	.	36	1	.	2	1	.	.	.	40
2.00-2.49	.	.	.	1	.	1	.	.	.	.	2
2.50-2.99	1	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	318	1403	755	142	45	27	1	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 2525.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	303	775	485	50	2	.	.	.	.	.	1615
0.50-0.99	.	903	627	196	37	6	.	.	.	.	1769
1.00-1.49	.	.	228	104	29	17	.	.	.	.	378
1.50-1.99	.	.	65	49	29	8	2	.	.	.	153
2.00-2.49	.	.	3	8	18	11	.	.	.	.	40
2.50-2.99	.	.	.	1	.	3	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	303	1678	1408	408	115	45	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 513.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	294	1228	928	65	2	.	.	.	.	.	2517
0.50-0.99	.	872	2025	582	46	7	.	.	.	.	3534
1.00-1.49	.	.	578	651	147	20	1	.	.	.	1397
1.50-1.99	.	.	53	349	177	58	.	.	.	.	837
2.00-2.49	.	.	1	65	147	65	6	.	.	.	284
2.50-2.99	.	.	.	2	65	78	16	.	.	.	161
3.00-3.49	5	44	12	.	.	.	66
3.50-3.99	13	14	.	.	.	35
4.00-4.49	4	.	.	.	12
4.50-4.99	6	.	.	1
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	1	.	1
7.00+	0
TOTAL	294	2100	3585	1714	591	285	53	21	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 8100.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	403	2357	872	19	2						3653
0.50-0.99		974	5523	893	13	3					7405
1.00-1.49			1158	1804	355	6					3323
1.50-1.99			93	838	616	164					1711
2.00-2.49				302	273	391	36				1002
2.50-2.99				7	364	208	101	14			695
3.00-3.49					22	249	85	26	1		384
3.50-3.99						118	118	29	2		270
4.00-4.49						7	94	72	7		171
4.50-4.99							18				99
5.00-5.49							1	42	11	1	55
5.50-5.99								6	23		29
6.00-6.49									13	1	13
6.50-6.99									3		4
7.00+										4	4
TOTAL	403	3331	7646	3863	1645	1146	453	252	74	6	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 17618.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	297	1722	458	17	1						2495
0.50-0.99		733	3490	332	20						4575
1.00-1.49			904	1171	121	4					2200
1.50-1.99			73	810	414	41					1338
2.00-2.49				299	322	178	10				809
2.50-2.99				9	371	149	25	2			556
3.00-3.49					47	185	32	12			276
3.50-3.99						102	66	13			181
4.00-4.49						11	57	22	2		92
4.50-4.99							10	42	3		55
5.00-5.49							2	19	7		28
5.50-5.99								2	14	1	17
6.00-6.49									8	1	9
6.50-6.99										2	2
7.00+									1	1	2
TOTAL	297	2455	4925	2638	1296	670	202	112	35	5	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 11837.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	220	876	326	9	1						1432
0.50-0.99		427	2081	162	11	1					2682
1.00-1.49		1	750	640	44	3					1438
1.50-1.99			48	772	128	14					962
2.00-2.49				362	290	19					671
2.50-2.99				4	337	25					366
3.00-3.49					43	57	1				101
3.50-3.99						25	2				27
4.00-4.49						4	1				5
4.50-4.99							3				3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	220	1304	3205	1949	854	148	7	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 7202.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	99	393	162	13							667
0.50-0.99		289	1253	130	8	1					1681
1.00-1.49			452	460	50	4					966
1.50-1.99			35	441	139	16					631
2.00-2.49				185	136	31					352
2.50-2.99				3	203	48					255
3.00-3.49					33	80	3				116
3.50-3.99						43	7				50
4.00-4.49						4	13				17
4.50-4.99											1
5.00-5.49								2			2
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	99	682	1902	1232	569	227	24	3	0	0	

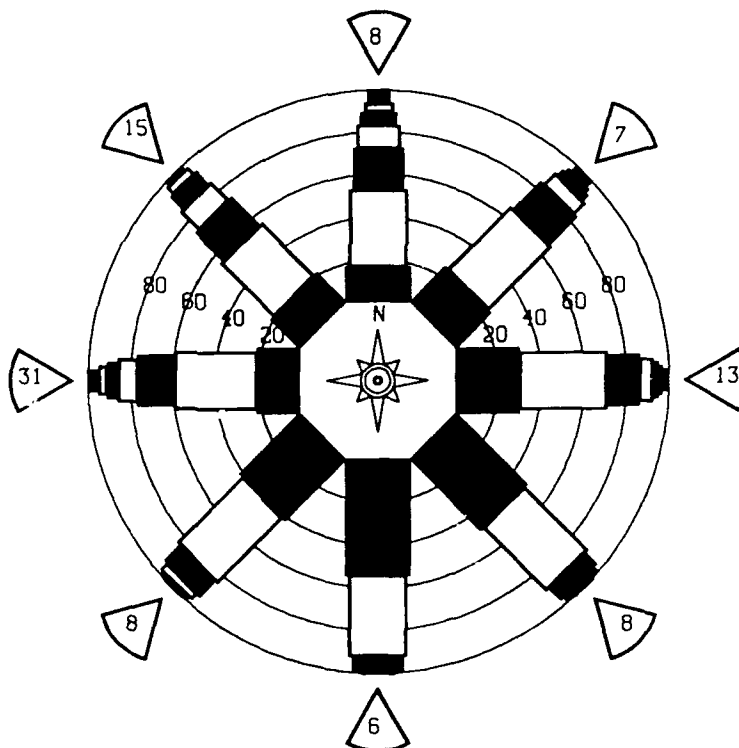
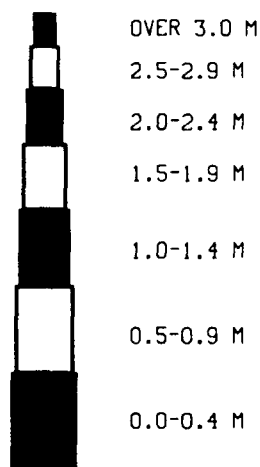
MEAN HS(M) = 1.2 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 4442.

STATION S35 47.53N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	511	1551	590	62	11	1	.	.	.	.	2726
0.50-0.99	.	1047	2442	359	48	18	.	.	.	.	3915
1.00-1.49	.	.	679	737	110	21	1	.	.	.	1548
1.50-1.99	.	.	63	450	219	43	1	.	.	.	776
2.00-2.49	.	.	.	158	155	98	7	.	.	.	418
2.50-2.99	.	.	.	3	179	72	16	2	.	.	272
3.00-3.49	17	101	16	3	.	.	139
3.50-3.99	51	30	5	.	.	86
4.00-4.49	4	31	11	.	.	46
4.50-4.99	7	17	.	.	25
5.00-5.49	10	2	.	12
5.50-5.99	1	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	511	2598	3774	1769	739	409	110	51	9	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION 35
47.53N, 88.13 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S35 (47.53N 88.13W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.2	1.2	1.2	0.9	0.7	0.7	0.5	0.7	1.2	1.4	1.4	1.0
1957	1.4	1.3	1.0	1.0	1.0	0.7	0.6	0.6	0.8	0.8	1.3	1.3	1.0
1958	0.9	1.4	0.6	1.0	0.9	0.7	0.6	0.6	0.9	1.0	1.6	1.1	0.9
1959	1.1	1.1	0.9	0.9	0.9	0.6	0.5	0.5	0.8	0.9	1.4	1.6	0.9
1960	1.2	1.2	1.0	1.1	0.9	0.5	0.5	0.6	0.7	1.0	1.5	1.2	0.9
1961	1.0	1.1	1.2	0.9	0.8	0.7	0.7	0.4	0.7	0.9	1.0	1.2	0.9
1962	1.5	1.0	0.9	0.8	0.7	0.5	0.5	0.4	0.6	0.8	0.8	1.2	0.8
1963	1.2	1.2	1.1	0.8	0.7	0.5	0.5	0.6	0.6	0.8	1.2	1.3	0.9
1964	1.3	1.1	1.3	1.1	0.8	0.6	0.6	0.8	0.9	1.0	1.2	1.1	1.0
1965	1.6	1.6	1.1	0.8	0.6	0.6	0.6	0.5	0.7	1.2	1.8	1.5	1.1
1966	1.7	1.6	1.9	1.2	1.2	0.7	0.7	0.7	1.0	1.6	1.6	1.6	1.3
1967	1.6	1.6	1.4	1.1	1.1	0.7	0.7	0.7	0.9	1.7	1.5	2.0	1.1
1968	1.4	2.4	1.7	1.3	0.9	0.7	0.8	0.8	0.8	1.3	1.9	1.7	1.3
1969	1.6	1.0	1.3	0.9	0.7	0.6	0.4	0.6	0.8	1.2	1.3	1.0	1.0
1970	1.1	1.3	1.1	1.1	0.9	0.5	0.6	0.6	0.9	1.0	1.3	1.1	1.0
1971	1.4	1.4	1.2	1.0	0.8	0.4	0.6	0.5	0.7	1.1	1.1	1.1	1.0
1972	1.6	1.2	1.2	0.8	0.5	0.5	0.4	0.5	0.9	1.1	1.1	1.1	0.9
1973	1.3	1.2	1.2	1.0	0.9	0.6	0.6	0.4	0.8	0.9	1.3	1.1	1.1
1974	1.1	0.8	1.2	0.9	0.8	0.7	0.6	0.6	0.8	0.9	1.2	1.1	0.9
1975	1.2	1.1	1.2	0.7	0.5	0.5	0.5	0.6	0.7	1.0	1.4	1.0	1.0
1976	1.3	1.3	1.4	0.9	0.7	0.5	0.4	0.6	0.7	0.6	1.0	1.1	1.1
1977	1.5	1.6	1.5	0.7	0.6	0.5	0.5	0.5	0.8	0.9	1.1	1.4	1.0
1978	1.3	1.0	0.9	1.0	0.6	0.5	0.5	0.6	0.9	0.8	2.2	1.3	0.9
1979	1.1	0.9	1.2	0.8	0.7	0.6	0.4	0.5	0.7	0.9	1.1	1.1	0.8
1980	1.2	0.9	1.1	0.8	0.7	0.6	0.4	0.6	0.9	1.2	0.9	1.3	0.9
1981	1.1	1.1	1.1	0.8	0.5	0.6	0.4	0.4	0.9	0.9	1.1	0.9	0.8
1982	1.7	1.3	1.5	1.0	0.7	0.6	0.5	0.5	0.8	1.0	2.2	3.3	1.0
1983	1.1	0.9	1.5	0.9	0.7	0.5	0.5	0.4	0.9	0.9	1.5	1.4	0.9
1984	1.1	1.1	1.3	1.0	0.7	0.6	0.5	0.4	0.7	0.9	1.3	1.1	0.9
1985	1.4	1.2	1.1	0.9	0.7	0.7	0.4	0.4	0.6	0.8	1.1	1.1	0.9
1986	1.2	0.9	1.2	1.1	0.6	0.6	0.5	0.4	0.8	0.8	1.2	1.1	0.9
1987	1.1	1.1	1.3	0.7	0.6	0.5	0.4	0.6	0.6	1.0	1.2	1.0	0.8
MEAN	1.3	1.2	1.2	0.9	0.7	0.6	0.5	0.6	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S35 (47.53N 88.13W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	4.3	6.7	4.2	2.9	2.1	1.5	1.6	2.9	4.8	4.3	5.0	
1957	3.7	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1958	3.0	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1959	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1960	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1961	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1962	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1963	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1964	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1965	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1966	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1967	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1968	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1969	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1970	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1971	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1972	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1973	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1974	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1975	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1976	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1977	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1978	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1979	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1980	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1981	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1982	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1983	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1984	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1985	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1986	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	
1987	3.3	3.3	3.3	3.3	3.3	2.2	1.1	1.1	1.1	2.8	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S35

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	266.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	119	472	168	13	11	1	.	.	.	.	772
0.50-0.99	.	249	1285	159	11	1	.	.	.	.	1705
1.00-1.49	.	.	311	506	54	2	.	.	.	.	873
1.50-1.99	.	.	25	262	183	18	.	.	.	.	488
2.00-2.49	.	.	.	85	93	106	.	.	.	.	284
2.50-2.99	.	.	.	4	121	56	2	.	.	.	183
3.00-3.49	12	137	5	.	.	.	154
3.50-3.99	79	22	.	.	.	101
4.00-4.49	6	62	2	.	.	70
4.50-4.99	16	7	.	.	23
5.00-5.49	3	7	.	.	10
5.50-5.99	2	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	119	721	1789	1029	474	405	110	16	3	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 4379.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	98	359	121	7	6	.	.	.	.	.	585
0.50-0.99	.	219	1104	114	55	2	.	.	.	.	1443
1.00-1.49	.	.	202	376	55	2	.	.	.	.	635
1.50-1.99	.	.	8	136	126	59	.	.	.	.	279
2.00-2.49	.	.	.	32	39	53	3	.	.	.	144
2.50-2.99	.	.	.	3	4	39	3	.	.	.	84
3.00-3.49	45	19	1	.	.	55
3.50-3.99	26	20	3	.	.	46
4.00-4.49	2	4	10	.	.	23
4.50-4.99	2	.	.	14
5.00-5.49	1	.	.	2
5.50-5.99	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	98	578	1435	668	289	176	51	18	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 3112.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	156	579	196	8	5	.	.	.	.	.	939
0.50-0.99	.	273	1384	131	5	1	.	.	.	.	1793
1.00-1.49	.	1	293	507	27	1	.	.	.	.	829
1.50-1.99	.	.	13	186	139	6	.	.	.	.	344
2.00-2.49	.	.	.	48	68	55	.	.	.	.	171
2.50-2.99	.	.	.	1	55	32	4	.	.	.	92
3.00-3.49	4	58	8	.	.	.	70
3.50-3.99	23	21	2	.	.	46
4.00-4.49	1	14	4	.	.	19
4.50-4.99	3	6	.	.	9
5.00-5.49	5	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	156	853	1886	881	298	176	50	17	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 4051.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	217	730	207	4	6	.	.	.	.	.	1158
0.50-0.99	.	361	1543	114	6	.	.	.	.	.	2024
1.00-1.49	.	.	312	350	29	1	.	.	.	.	692
1.50-1.99	.	.	13	156	90	6	.	.	.	.	268
2.00-2.49	.	.	.	41	34	20	.	.	.	.	95
2.50-2.99	67	22	5	.	.	.	94
3.00-3.49	2	53	6	.	.	.	61
3.50-3.99	24	13	2	.	.	39
4.00-4.49	13	7	.	.	20
4.50-4.99	3	4	.	.	7
5.00-5.49	5	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	217	1091	2075	665	228	129	40	18	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 4187.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	441	1296	288	11	21	.	.	.	.	.	2036
0.50-0.99	.	654	2099	129	21	.	.	.	.	.	2903
1.00-1.49	.	.	547	452	43	5	.	.	.	.	1047
1.50-1.99	.	.	13	340	89	7	.	.	.	.	449
2.00-2.49	.	.	.	79	72	28	1	.	.	.	180
2.50-2.99	.	.	.	2	88	28	.	.	.	.	118
3.00-3.49	6	71	3	.	.	.	83
3.50-3.99	40	14	3	.	.	53
4.00-4.49	5	36	5	.	.	46
4.50-4.99	9	1	.	15
5.00-5.49	8	1	.	9
5.50-5.99	5	1	.	6
6.00-6.49	4	.	4
6.50-6.99	1	.	1
7.00+	1
TOTAL	441	1950	2947	1013	319	184	59	31	9	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 6519.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	430	958	317	11	13	2	.	.	.	.	1716
0.50-0.99	.	579	1097	122	13	2	.	.	.	.	1813
1.00-1.49	.	.	239	271	51	17	.	.	.	.	578
1.50-1.99	.	.	13	114	48	24	2	.	.	.	201
2.00-2.49	.	.	.	37	33	18	3	.	.	.	91
2.50-2.99	27	20	7	.	.	.	54
3.00-3.49	18	7	.	.	.	25
3.50-3.99	11	3	2	.	.	16
4.00-4.49	1	7	.	.	.	8
4.50-4.99	2	.	.	2
5.00-5.49	1	1	.	2
5.50-5.99	0
6.00-6.49	2	2
6.50-6.99	1	.	1
7.00+	0
TOTAL	430	1537	1666	555	172	111	29	5	2	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 4230.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	401	1043	633	191	21	1	.	.	.	.	2290
0.50-0.99	.	933	757	380	217	85	2	.	.	.	2374
1.00-1.49	.	.	173	194	115	88	7	.	.	.	577
1.50-1.99	.	.	32	47	41	34	9	1	.	.	164
2.00-2.49	.	.	2	3	17	27	7	2	.	.	58
2.50-2.99	4	8	2	.	.	14
3.00-3.49	4	4	.	.	8
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	401	1976	1597	815	411	239	37	9	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5140.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	562	1032	599	287	75	6	.	.	.	.	2561
0.50-0.99	.	1152	304	214	217	109	3	.	.	.	1999
1.00-1.49	.	.	173	48	50	50	6	.	.	.	328
1.50-1.99	.	.	40	6	12	13	2	1	.	.	78
2.00-2.49	.	.	1	1	3	8	6	.	.	.	19
2.50-2.99	2	4	.	.	.	6
3.00-3.49	1	2	.	.	3
3.50-3.99	1	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	562	2184	1117	556	357	188	25	6	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4683.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	459	863	402	60	13	1	.	.	.	.	1798
0.50-0.99	.	802	264	117	59	22	2	.	.	.	1266
1.00-1.49	.	.	189	12	25	32	3	.	.	.	261
1.50-1.99	.	.	32	.	7	6	6	.	.	.	51
2.00-2.49	.	.	2	2	.	4	1	1	.	.	10
2.50-2.99	1	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	459	1665	889	191	104	65	13	1	0	0	
MEAN HS(M) = 0.5	LARGEST HS(M)= 2.7		MEAN TP(SEC)= 3.5		NO. OF CASES= 3176.						

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	271	606	287	31	59	8	.	.	.	.	1195
0.50-0.99	.	722	302	95	36	8	.	.	.	.	1163
1.00-1.49	.	.	182	6	18	16	.	.	.	.	222
1.50-1.99	.	.	52	3	1	4	.	.	.	.	60
2.00-2.49	.	.	.	2	.	2	1	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	271	1328	823	137	55	30	1	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)=		2.1	MEAN TP(SEC)=		3.5	NO. OF CASES=		2480.		

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	276	687	407	42	1	.	.	.	.	.	1413
0.50-0.99	.	885	451	192	31	2	.	.	.	.	1561
1.00-1.49	.	.	193	45	37	16	.	.	.	.	291
1.50-1.99	.	.	71	7	18	7	3	.	.	.	106
2.00-2.49	.	.	2	4	2	10	.	.	.	.	18
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	276	1572	1124	292	89	35	3	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.5		MEAN TP(SEC)= 3.7		NO. OF CASES= 3180.						

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	279	1040	842	56							2217
0.50-0.99		927	1503	552	59	5	.	.	.	.	3046
1.00-1.49	.	.	396	440	159	34	.	.	.	.	1030
1.50-1.99	.	.		172	185	47	2	.	.	.	485
2.00-2.49	.	.	3	42	72	81	12	.	.	.	210
2.50-2.99	.	.		2	31	33	11	2	.	.	79
3.00-3.49	.	.		1	4	13	5	6	.	.	29
3.50-3.99	.	.				10	6	1	1	.	18
4.00-4.49	.	.					2	3	.	.	5
4.50-4.99	.	.					1	1	.	.	2
5.00-5.49	.	.					.	.	.	.	0
5.50-5.99	.	.					.	.	.	.	0
6.00-6.49	.	.					.	.	.	.	0
6.50-6.99	.	.					.	.	.	.	0
7.00+	.	.					.	.	.	.	0
TOTAL	279	1967	2823	1265	510	223	40	13	1	0	
MEAN HS (M) = 0.8	LARGEST HS (M) = 4.9		MEAN TP (SEC) = 4.3		NO. OF CASES = 6673.						

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	324	2191	1053	17	17	2	.	.	.	.	3585
0.50-0.99	.	936	5545	1131	17	2	.	.	.	.	7631
1.00-1.49	.	.	1137	1779	428	14	.	.	.	.	3358
1.50-1.99	.	.	111	788	542	237	1	.	.	.	1679
2.00-2.49	.	.	1	265	282	379	45	2	.	.	974
2.50-2.99	.	.	.	7	305	223	114	20	1	.	670
3.00-3.49	16	241	77	44	4	.	382
3.50-3.99	1	79	105	53	5	.	243
4.00-4.49	3	68	65	11	.	147
4.50-4.99	18	51	11	.	80
5.00-5.49	32	19	2	53
5.50-5.99	3	23	.	26
6.00-6.49	13	.	13
6.50-6.99	2	2	4
7.00+	3
TOTAL	324	3127	7847	3987	1591	1178	428	270	89	7	

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 17644.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	267	1685	513	9	19	.	.	.	.	.	2474
0.50-0.99	.	635	3545	398	19	.	.	.	.	.	4597
1.00-1.49	.	.	828	1357	158	3	.	.	.	.	2346
1.50-1.99	.	.	68	720	472	68	.	.	.	.	1328
2.00-2.49	.	.	.	236	296	219	11	.	.	.	762
2.50-2.99	.	.	.	2	339	144	36	6	.	.	527
3.00-3.49	22	207	38	17	1	.	285
3.50-3.99	89	66	21	4	.	180
4.00-4.49	7	50	37	2	.	96
4.50-4.99	5	32	10	.	47
5.00-5.49	2	18	12	.	32
5.50-5.99	4	16	1	21
6.00-6.49	4	1	5
6.50-6.99	2	.	2
7.00+	3	3
TOTAL	267	2320	4954	2722	1306	737	208	135	51	5	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 11897.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	165	885	325	5	14	1	.	.	.	.	1380
0.50-0.99	.	437	2127	189	14	1	.	.	.	.	2768
1.00-1.49	.	.	537	915	47	3	.	.	.	.	1502
1.50-1.99	.	.	42	702	242	8	.	.	.	.	994
2.00-2.49	.	.	.	189	332	35	1	.	.	.	557
2.50-2.99	.	.	.	2	419	51	.	.	.	.	472
3.00-3.49	11	194	2	.	.	.	207
3.50-3.99	56	3	.	.	.	58
4.00-4.49	6	3	.	.	.	9
4.50-4.99	5	.	.	.	5
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	165	1322	3031	2002	1065	354	14	2	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 7451.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	114	383	186	10	10	.	.	.	.	.	693
0.50-0.99	.	272	1317	145	10	2	.	.	.	.	1744
1.00-1.49	.	.	387	563	55	19	.	.	.	.	1007
1.50-1.99	.	.	27	421	168	19	.	.	.	.	635
2.00-2.49	.	.	.	139	183	54	.	.	.	.	376
2.50-2.99	.	.	.	3	207	57	3	.	.	.	270
3.00-3.49	19	150	4	.	.	.	173
3.50-3.99	62	13	.	.	.	75
4.00-4.49	7	23	1	.	.	31
4.50-4.99	1	5	.	.	6
5.00-5.49	2	.	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	114	655	1917	1281	642	351	44	9	0	0	

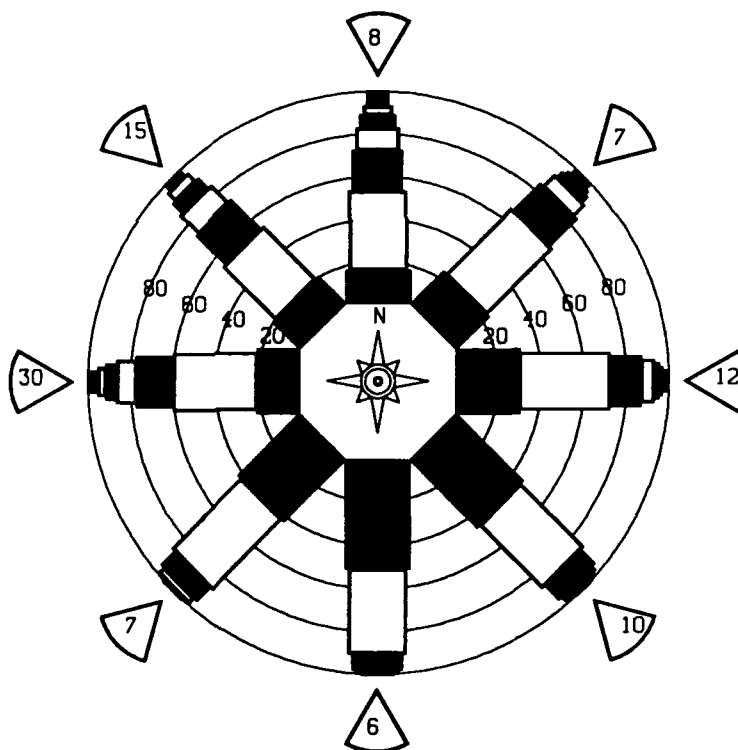
MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 4702.

STATION S36 47.53N 87.93W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	458	1481	655	77	11						2682
0.50-0.99		1004	2463	419	74	23					3983
1.00-1.49			610	783	135	28	1				1557
1.50-1.99			64	406	237	52	2				761
2.00-2.49			1	120	155	110	9				395
2.50-2.99				2	170	71	20	3			266
3.00-3.49					10	119	16	7			152
3.50-3.99						50	29	8	1		88
4.00-4.49						4	30	12	1		47
4.50-4.99							6	13	2		21
5.00-5.49								8	3		11
5.50-5.99								1	4		5
6.00-6.49									2		2
6.50-6.99											0
7.00+											0
TOTAL	458	2485	3793	1807	792	457	113	52	13	0	
MEAN HS(M)= 0.9 LARGEST HS(M)= 9.2 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.											

STATION 36
47.53N, 87.93 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S36 (47.53N 87.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.2	1.2	1.2	0.8	0.7	0.6	0.5	0.7	1.1	1.4	1.4	1.0
1957	1.4	1.3	1.0	1.0	0.9	0.7	0.6	0.6	0.8	0.8	1.3	1.3	1.0
1958	0.9	1.4	0.6	1.0	0.9	0.7	0.6	0.6	0.8	1.0	0.6	1.1	0.9
1959	1.1	1.1	0.9	0.9	0.9	0.6	0.5	0.5	0.8	0.9	1.4	1.6	0.9
1960	1.2	1.2	0.9	1.1	0.8	0.5	0.5	0.6	0.7	1.0	1.5	1.1	0.9
1961	1.0	1.1	1.1	1.2	0.9	0.6	0.4	0.4	0.7	0.9	0.8	1.1	1.2
1962	1.5	1.0	0.8	0.8	0.7	0.5	0.5	0.4	0.6	0.8	0.8	1.2	0.8
1963	1.2	1.3	1.1	1.1	0.8	0.7	0.5	0.5	0.6	0.8	1.2	1.3	0.9
1964	1.3	1.1	1.3	1.1	0.8	0.6	0.6	0.6	0.9	1.1	2.2	1.1	1.0
1965	1.6	1.6	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.1	1.8	1.5	1.1
1966	1.7	1.6	1.9	1.2	1.2	0.6	0.7	0.6	1.0	1.6	1.7	1.6	1.1
1967	1.6	1.6	1.4	1.1	1.1	0.7	0.7	0.7	0.9	1.7	1.5	1.9	1.1
1968	1.3	2.4	1.6	1.2	0.9	0.7	0.7	0.8	0.8	1.3	0.8	1.7	1.1
1969	1.7	1.0	1.4	0.9	0.7	0.6	0.6	0.6	0.8	1.2	1.3	1.1	1.1
1970	1.1	1.4	1.1	1.1	0.9	0.5	0.6	0.6	0.9	1.1	1.4	1.1	1.1
1971	1.4	1.4	1.2	1.0	0.8	0.5	0.6	0.5	0.7	1.1	1.3	1.1	1.1
1972	1.5	1.2	1.2	0.8	0.5	0.5	0.4	0.5	0.9	1.1	0.0	1.1	0.9
1973	1.3	1.2	1.2	1.0	0.8	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1
1974	1.0	0.8	1.2	0.9	0.7	0.6	0.6	0.6	0.8	0.9	2.2	1.1	1.1
1975	1.1	1.1	1.2	0.7	0.4	0.5	0.6	0.6	0.7	1.0	1.4	1.0	0.9
1976	1.4	1.3	1.4	0.9	0.7	0.6	0.4	0.3	0.7	0.0	0.0	1.1	0.9
1977	1.5	1.6	1.5	0.7	0.6	0.5	0.5	0.5	0.8	0.0	0.0	1.4	0.9
1978	1.3	1.0	0.9	1.1	0.6	0.5	0.5	0.5	0.9	0.0	2.2	1.3	0.9
1979	1.1	0.9	1.1	0.8	0.7	0.6	0.6	0.6	0.7	0.9	1.1	1.2	0.8
1980	1.2	0.9	1.1	0.8	0.6	0.6	0.4	0.6	0.9	1.1	0.9	1.3	0.9
1981	1.7	1.1	1.1	0.8	0.6	0.6	0.4	0.6	0.9	1.1	1.1	0.9	0.9
1982	1.7	1.3	1.5	1.0	0.7	0.6	0.5	0.5	0.8	1.1	3.3	1.3	0.9
1983	1.1	0.9	1.5	0.8	0.7	0.6	0.5	0.4	0.7	0.0	3.3	1.4	0.9
1984	1.1	1.1	1.3	1.0	0.9	0.6	0.5	0.4	0.8	0.0	3.3	1.4	0.9
1985	1.5	1.1	1.5	0.9	0.6	0.7	0.4	0.6	0.8	0.0	1.1	1.4	0.9
1986	1.5	0.9	1.2	1.1	0.6	0.6	0.5	0.5	0.8	0.0	2.2	1.1	0.9
1987	1.1	1.1	1.3	0.7	0.6	0.6	0.4	0.6	0.6	1.0	2.2	1.1	0.9
MEAN	1.3	1.2	1.2	0.9	0.7	0.6	0.5	0.5	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S36 (47.53N 87.93W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	4.1	6.5	4.0	2.9	2.3	1.5	1.5	3.0	4.8	4.1	4.7	
1957	4.0	3.7	3.8	4.2	2.8	2.5	2.7	2.2	3.0	2.8	4.8	5.1	
1958	3.7	3.8	2.8	5.0	3.0	1.8	2.1	2.3	3.4	4.3	5.7	4.9	
1959	3.2	4.5	4.3	3.2	4.3	1.7	2.0	1.8	3.1	3.2	5.3	6.3	
1960	4.0	3.5	5.4	3.5	3.2	1.8	1.7	2.7	3.6	3.9	4.4	4.1	
1961	3.4	4.0	5.1	3.0	2.2	2.7	2.8	1.9	3.6	3.2	4.3	4.5	
1962	4.3	3.8	3.7	3.3	2.2	1.6	2.7	2.1	2.6	5.5	4.3	4.0	
1963	4.2	3.7	4.3	3.5	1.8	1.6	1.6	1.6	2.3	2.4	3.7	5.0	
1964	5.4	4.8	3.8	4.4	2.6	1.9	1.6	2.7	4.1	3.9	5.2	3.4	
1965	4.4	6.3	4.4	2.9	2.6	2.2	1.9	2.2	3.1	4.5	6.2	4.5	
1966	7.4	5.4	5.9	4.2	4.0	3.7	2.2	2.9	3.3	6.6	5.4	5.5	
1967	5.2	4.4	4.2	5.0	3.6	2.2	3.3	2.8	3.7	5.1	4.7	6.3	
1968	4.6	6.3	6.5	4.7	3.3	2.7	3.6	3.3	3.4	4.9	5.7	6.0	
1969	4.6	4.6	4.8	3.7	2.0	2.0	2.3	2.6	2.6	3.9	4.1	4.0	
1970	4.2	4.6	4.1	5.0	3.4	2.0	2.8	2.0	3.8	3.7	4.4	5.2	
1971	4.5	5.8	4.7	3.0	3.5	1.7	1.8	1.6	2.4	4.7	5.7	4.8	
1972	4.4	4.3	4.1	3.3	1.3	1.8	1.3	1.4	3.9	5.0	3.7	4.7	
1973	3.5	3.3	3.9	3.5	3.1	1.3	2.3	1.3	3.9	3.0	3.6	3.8	
1974	3.7	3.6	4.0	3.2	1.8	1.7	2.6	2.0	2.3	2.7	3.8	4.1	
1975	4.3	5.6	4.0	2.0	1.2	3.0	2.1	2.1	2.4	5.6	5.3	4.6	
1976	5.5	4.5	4.7	3.5	2.7	1.5	1.0	1.8	2.7	2.7	3.2	5.3	
1977	5.3	6.1	5.5	2.5	1.9	1.6	3.2	2.3	4.4	4.1	4.8	5.4	
1978	4.2	3.5	4.0	3.3	2.8	1.6	1.5	1.9	2.9	3.7	3.8	3.8	
1979	3.4	3.8	4.2	4.2	2.1	1.7	2.0	1.8	2.0	4.4	2.9	3.0	
1980	6.5	3.7	4.7	2.6	1.9	1.8	1.3	2.0	3.6	5.6	4.6	5.1	
1981	4.0	3.3	4.6	3.3	1.7	3.3	1.1	1.2	5.8	3.9	5.7	3.5	
1982	6.0	4.2	9.2	5.9	2.5	2.8	2.0	1.6	2.7	4.2	5.6	4.9	
1983	4.3	4.8	4.1	3.1	1.7	2.5	2.1	1.7	2.8	3.4	5.8	4.0	
1984	5.0	3.9	5.3	3.7	3.0	2.1	2.6	1.6	2.0	4.2	6.2	5.0	
1985	5.4	3.6	7.0	4.0	2.7	4.1	1.1	1.9	3.2	3.1	2.8	5.3	
1986	4.3	3.5	4.0	3.8	3.4	1.4	1.3	1.1	3.0	4.5	4.4	4.1	
1987	3.3	5.2	4.6	2.7	2.2	1.5	1.7	2.7	2.1	4.3	4.2	3.8	

32 YR. STATISTICS FOR WIS STATION S36

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	9.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	268.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		82031400

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	98	478	188	6	.	.	.	.	.	.	770
0.50-0.99	.	220	1440	142	5	.	.	.	.	.	1807
1.00-1.49	.	.	343	558	42	3	.	.	.	.	946
1.50-1.99	.	.	32	263	208	20	.	.	.	.	523
2.00-2.49	.	.	.	94	84	91	.	.	.	.	269
2.50-2.99	140	67	2	.	.	.	209
3.00-3.49	7	152	3	1	.	.	163
3.50-3.99	82	19	.	.	.	101
4.00-4.49	9	68	1	.	.	78
4.50-4.99	18	4	.	.	22
5.00-5.49	3	7	.	.	10
5.50-5.99	6	1	.	7
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	98	698	2003	1063	486	424	113	19	1	0	4598

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.9 NO. OF CASES= 4598.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	93	356	136	1	.	.	.	.	.	.	586
0.50-0.99	.	216	1267	112	2	.	.	.	.	.	1597
1.00-1.49	.	.	243	430	40	2	.	.	.	.	715
1.50-1.99	.	.	9	151	131	11	.	.	.	.	302
2.00-2.49	.	.	.	40	65	47	1	.	.	.	153
2.50-2.99	54	40	2	.	.	.	96
3.00-3.49	1	62	6	.	.	.	69
3.50-3.99	34	22	.	.	.	56
4.00-4.49	3	21	.	.	.	24
4.50-4.99	7	.	.	.	10
5.00-5.49	3	.	.	4
5.50-5.99	4	.	.	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	93	572	1655	734	293	199	59	7	0	0	3389

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 3389.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	112	578	202	1	.	.	.	.	.	.	893
0.50-0.99	.	284	1470	99	7	.	.	.	.	.	1860
1.00-1.49	.	.	295	533	33	1	.	.	.	.	862
1.50-1.99	.	.	9	191	130	8	.	.	.	.	338
2.00-2.49	.	.	.	39	58	38	.	.	.	.	135
2.50-2.99	69	31	1	.	.	.	101
3.00-3.49	3	39	6	.	.	.	68
3.50-3.99	27	24	.	.	.	51
4.00-4.49	12	.	.	.	12
4.50-4.99	2	.	.	.	9
5.00-5.49	3	.	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	112	862	1976	863	300	164	45	10	0	0	4063

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4063.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	188	753	182	1	.	.	.	.	.	.	1124
0.50-0.99	.	353	1603	90	3	.	.	.	.	.	2049
1.00-1.49	.	.	288	339	22	1	.	.	.	.	650
1.50-1.99	.	.	7	154	91	2	.	.	.	.	254
2.00-2.49	.	.	.	37	34	19	.	.	.	.	92
2.50-2.99	54	36	2	.	.	.	92
3.00-3.49	2	40	5	.	.	.	47
3.50-3.99	22	5	.	.	.	27
4.00-4.49	1	12	2	.	.	15
4.50-4.99	2	3	.	.	5
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	188	1106	2080	621	206	121	28	5	0	0	4084

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4084.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	335	1171	249	2	.	.	.	.	.	.	1757
0.50-0.99	.	545	1873	139	6	.	.	.	.	.	2563
1.00-1.49	.	.	422	394	48	5	.	.	.	.	869
1.50-1.99	.	.	16	248	71	7	.	.	.	.	342
2.00-2.49	.	.	.	63	62	23	.	.	.	.	148
2.50-2.99	.	.	.	2	75	24	1	.	.	.	102
3.00-3.49	1	63	2	2	.	.	68
3.50-3.99	40	9	1	.	.	50
4.00-4.49	2	26	2	.	.	30
4.50-4.99	8	8	1	.	17
5.00-5.49	2	.	.	8
5.50-5.99	1	.	3
6.00-6.49	1	.	1
6.50-6.99	1	.	1
7.00+	0
TOTAL	335	1716	2560	848	263	164	46	23	4	0	5584.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 5584.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	299	855	228	5	.	.	.	.	.	.	1387
0.50-0.99	.	386	1219	110	4	.	.	.	.	.	1719
1.00-1.49	.	.	291	303	65	4	.	.	.	.	683
1.50-1.99	.	.	5	150	64	35	1	.	.	.	255
2.00-2.49	.	.	.	42	33	22	2	.	.	.	99
2.50-2.99	37	11	1	.	.	.	49
3.00-3.49	1	29	3	.	.	.	33
3.50-3.99	17	14	3	.	.	34
4.00-4.49	2	2	.	.	4
4.50-4.99	1	.	.	1
5.00-5.49	1	1	.	2
5.50-5.99	1	1	.	2
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	0
TOTAL	299	1241	1743	610	204	118	23	8	4	0	3986.

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3986.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	305	878	752	57	.	.	.	.	.	.	1992
0.50-0.99	.	483	1244	541	105	9	.	.	.	.	2382
1.00-1.49	.	.	294	236	180	91	.	.	.	.	801
1.50-1.99	.	.	18	113	73	58	3	.	.	.	265
2.00-2.49	.	.	.	37	19	21	6	.	.	.	83
2.50-2.99	.	.	.	3	25	18	6	2	.	.	54
3.00-3.49	3	20	5	.	.	.	28
3.50-3.99	8	16	1	.	.	25
4.00-4.49	9	2	.	.	11
4.50-4.99	3	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	305	1361	2308	987	405	225	45	8	0	0	5292.

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5292.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	418	999	1336	340	28	.	.	.	.	.	3121
0.50-0.99	.	1098	627	897	597	82	.	.	.	.	3301
1.00-1.49	.	.	239	121	236	216	8	1	.	.	821
1.50-1.99	.	.	37	64	37	125	18	1	.	.	282
2.00-2.49	.	.	1	19	13	13	14	6	.	.	66
2.50-2.99	8	8	2	.	.	.	18
3.00-3.49	1	7	.	.	.	.	8
3.50-3.99	1	.	.	.	.	1
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	418	2097	2240	1441	920	452	44	8	0	0	7139.

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 7139.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	362	793	418	39	2						1614
0.50-0.99		779	340	189	133	24	.	.	.	.	1465
1.00-1.49	.	.	183	20	34	51	.	.	.	.	288
1.50-1.99	.	.	55	.	3	28	8	.	.	.	95
2.00-2.49	.	.	3	.	1	1	9	1	.	.	15
2.50-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	362	1572	999	248	173	104	18	2	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.5		MEAN TP(SEC)= 3.8		NO. OF CASES= 3261.						

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	240	607	313	17	.	.	.	.	.	.	1177
0.50-0.99	.	674	312	129	37	8	.	.	.	.	1160
1.00-1.49	.	.	128	18	28	24	1	.	.	.	199
1.50-1.99	.	.	62	1	3	13	.	.	.	.	79
2.00-2.49	.	.	1	5	.	3	2	.	.	.	11
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	240	1281	816	171	68	48	3	0	0	0	
MEAN HS (M) = 0.6	LARGEST HS (M) = 2.6		MEAN TP (SEC) = 3.6		NO. OF CASES = 2464.						

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	202	657	325	27	1						1212
0.50-0.99		733	449	199	32	2					1415
1.00-1.49			190	36	51	18					295
1.50-1.99			86	6	8	14					114
2.00-2.49			2	8		5	2				17
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	202	1390	1052	276	92	39	2	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.4		MEAN TP(SEC)= 3.7		NO. OF CASES= 2863.						

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	228	865	625	31	.	.	.	.	.	.	1749
0.50-0.99	.	843	1088	428	50	.	.	.	.	.	2409
1.00-1.49	.	.	337	273	144	35	.	.	.	.	789
1.50-1.99	.	.	100	118	112	50	2	.	.	.	382
2.00-2.49	.	.	3	25	31	53	8	1	.	.	121
2.50-2.99	.	.	.	3	14	19	5	4	.	.	45
3.00-3.49	1	12	4	3	.	.	20
3.50-3.99	4	5	.	.	.	9
4.00-4.49	1	2	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	228	1708	2153	878	352	173	25	10	0	0	
MEAN HS (M) = 0.8	LARGEST HS (M) = 4.3		MEAN TP (SEC) = 4.2		NO. OF CASES = 5182.						

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	265	1972	1106	16							3359
0.50-0.99		812	5335	1321	22						7490
1.00-1.49			1098	1782	506	26	1				3413
1.50-1.99			104	706	549	291	3				1653
2.00-2.49				232	288	404	57	1			982
2.50-2.99				9	257	210	106	34	1		617
3.00-3.49					20	189	75	59	8		351
3.50-3.99						67	91	55	7		220
4.00-4.49						6	42	54	14		116
4.50-4.99							13	37	19		69
5.00-5.49								24	22	2	48
5.50-5.99									22	1	22
6.00-6.49									12		13
6.50-6.99											0
7.00+										4	4
TOTAL	265	2784	7643	4066	1642	1193	388	264	105	7	

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 17191.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	211	1642	496	1							2350
0.50-0.99		622	3621	435	8						4886
1.00-1.49			748	1435	198	3					2405
1.50-1.99			40	714	514	86					1354
2.00-2.49				224	313	228	12				777
2.50-2.99				2	265	155	45	9			476
3.00-3.49					24	231	47	19			321
3.50-3.99						78	62	29	7		176
4.00-4.49						11	48	33	7		99
4.50-4.99						1	4	32	17	1	55
5.00-5.49							1	11	9	2	23
5.50-5.99									13	1	14
6.00-6.49									6		8
6.50-6.99									1	2	3
7.00+										1	1
TOTAL	211	2264	4905	2831	1323	793	219	133	60	9	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 11939.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	140	883	287	1							1311
0.50-0.99		413	2146	198	6						2763
1.00-1.49			522	988	55	2					1567
1.50-1.99			43	626	294	6					969
2.00-2.49				192	310	54					556
2.50-2.99				1	374	79	1				455
3.00-3.49					65	208	1				274
3.50-3.99						69	8				77
4.00-4.49						14	7				21
4.50-4.99							7	1			8
5.00-5.49								2			2
5.50-5.99								1			1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	140	1296	2998	2006	1104	432	24	4	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 7497.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	116	436	189	5							746
0.50-0.99		257	1441	128	9						1835
1.00-1.49			391	635	59	1					1086
1.50-1.99			29	417	202	22					670
2.00-2.49				133	165	59					357
2.50-2.99				1	197	69	2				269
3.00-3.49					8	172	6	1			187
3.50-3.99						88	16				104
4.00-4.49						9	29				38
4.50-4.99							4	3			7
5.00-5.49								1			1
5.50-5.99								2			2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	116	693	2050	1319	640	420	57	7	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 4972.

STATION S37 47.53N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

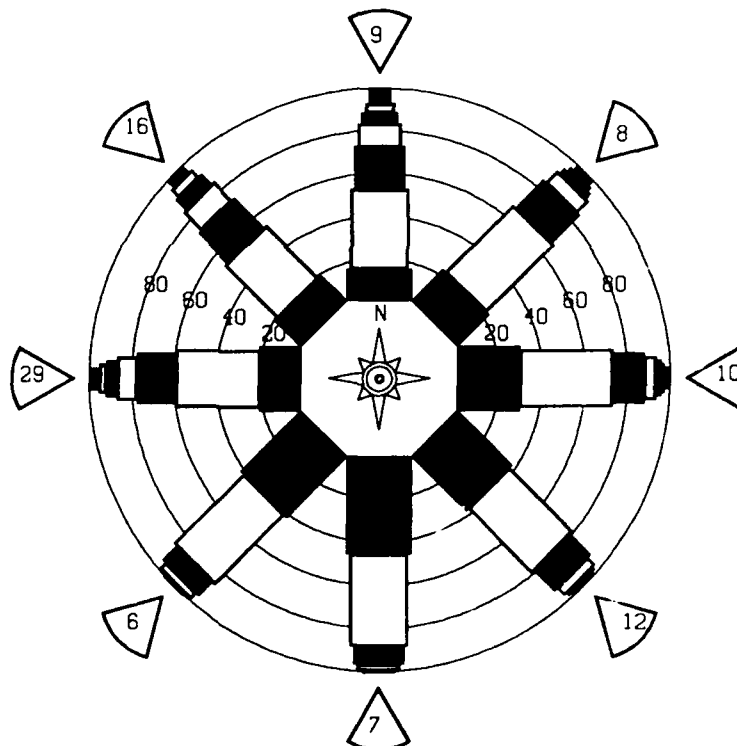
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	361	1392	704	55	3						2515
0.50-0.99		872	2348	516	103	12					4051
1.00-1.49			602	812	175	48	1				1638
1.50-1.99			65	392	249	78	3				787
2.00-2.49			1	119	148	108	11				359
2.50-2.99				2	157	77	18	5			163
3.00-3.49					14	125	16	8			93
3.50-3.99						54	28	9			44
4.00-4.49							6	10			19
4.50-4.99								6			9
5.00-5.49								1			4
5.50-5.99											2
6.00-6.49											2
6.50-6.99											2
7.00+											
TOTAL	361	2264	3920	1896	849	507	112	48	14	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.

STATION 37
47.53N, 87.72 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S37 (47.53N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	1.2	1.2	1.1	0.8	0.6	0.6	0.5	0.7	1.2	1.4	1.3	1.0
1957	1.4	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1958	0.9	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1959	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1960	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1961	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1962	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1963	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1964	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1965	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1966	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1967	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1968	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1969	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1970	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1971	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1972	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1973	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1974	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1975	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1976	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1977	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1978	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1979	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1980	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1981	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1982	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1983	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1984	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1985	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1986	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
1987	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0
MEAN	1.3	1.2	1.2	0.9	0.7	0.6	0.5	0.6	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S37 (47.53N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.2	3.9	6.1	3.9	2.7	1.7	1.4	1.5	3.0	4.8	3.8	4.5	
1957	3.6	3.8	3.7	3.9	2.8	2.5	2.8	1.8	3.3	3.0	4.6	5.1	
1958	3.4	3.8	3.7	3.9	2.7	2.7	2.8	1.7	3.3	3.0	4.4	4.8	
1959	3.1	4.7	4.1	3.1	4.3	1.7	1.9	1.8	3.0	3.3	5.4	6.4	
1960	3.8	3.6	4.0	3.6	3.1	1.7	1.7	2.7	2.6	3.9	4.7	4.0	
1961	3.5	3.7	4.9	2.8	3.3	2.3	2.4	1.9	3.4	3.4	3.9	4.4	
1962	4.0	3.7	3.5	3.2	2.2	1.8	2.5	2.0	3.5	3.2	4.4	4.1	
1963	4.0	3.8	3.3	3.4	1.9	1.7	1.6	2.6	2.5	3.5	4.4	4.7	
1964	5.1	4.8	3.8	4.4	2.1	1.5	1.5	4.1	3.8	3.3	3.3	3.3	
1965	4.3	6.1	5.2	2.2	3.5	2.2	1.9	3.3	3.0	4.4	4.4	4.4	
1966	7.0	5.0	5.7	3.9	3.7	2.1	1.1	3.3	3.3	5.5	5.3	5.3	
1967	4.9	4.4	4.0	4.4	3.6	2.1	3.4	3.3	3.8	5.0	4.4	4.4	
1968	4.5	6.3	6.5	4.4	3.3	2.5	3.6	3.3	3.3	4.4	4.4	4.4	
1969	4.4	4.7	5.1	3.6	2.0	2.0	2.3	2.3	3.3	3.3	5.0	5.0	
1970	4.3	4.6	4.0	4.8	3.3	1.7	2.8	2.3	3.3	4.9	4.4	4.4	
1971	4.4	5.7	4.3	2.9	3.4	1.7	1.6	1.1	3.3	4.4	4.4	4.4	
1972	4.5	4.2	4.4	3.3	1.4	1.6	1.3	1.1	3.3	4.4	4.4	4.4	
1973	3.6	3.5	3.4	3.3	3.1	1.2	2.2	1.1	3.3	3.3	3.3	3.3	
1974	3.3	3.3	3.4	3.3	3.3	1.1	1.8	1.5	3.3	3.3	3.3	3.3	
1975	3.9	5.1	3.8	1.1	2.2	2.8	2.2	2.0	3.3	3.3	3.3	3.3	
1976	5.7	4.4	4.6	3.4	2.8	2.0	2.2	2.0	3.3	3.3	3.3	3.3	
1977	4.4	3.3	5.6	5.7	3.0	1.6	3.3	1.1	3.3	4.9	4.4	4.4	
1978	4.4	3.3	4.4	4.0	3.3	1.1	3.3	1.1	3.3	4.4	4.4	4.4	
1979	3.3	3.3	4.4	4.4	1.1	1.6	2.2	1.1	3.3	4.4	4.4	4.4	
1980	3.3	3.3	4.4	4.4	1.1	1.4	1.1	1.1	3.3	4.4	4.4	4.4	
1981	3.8	3.2	4.4	3.3	3.3	3.2	1.1	1.1	3.3	4.4	4.4	4.4	
1982	6.0	1.1	9.3	3.3	3.3	1.1	1.1	1.1	3.3	4.4	4.4	4.4	
1983	4.4	5.0	4.4	3.3	3.3	3.3	2.2	1.1	3.3	4.4	4.4	4.4	
1984	5.0	4.1	3.3	3.3	3.3	2.0	2.3	1.1	3.3	4.4	4.4	4.4	
1985	5.4	3.3	6.0	3.3	3.3	4.1	1.1	1.1	3.3	4.4	4.4	4.4	
1986	4.3	3.3	5.1	3.3	3.3	1.4	1.1	1.1	3.3	4.4	4.4	4.4	
1987	3.3	5.5	4.3	2.8	2.2	1.5	1.7	2.4	3.3	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S37

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	9.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	270.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	513	143	124	3	.	.	.	.	.	740
0.50-0.99	.	229	1581	626	44	.	.	.	.	.	1937
1.00-1.49	.	.	364	284	209	12	.	.	.	.	1034
1.50-1.99	.	.	38	121	111	90	.	.	.	.	543
2.00-2.49	.	.	.	2	160	58	2	.	.	.	322
2.50-2.99	8	164	5	.	.	.	222
3.00-3.49	103	20	.	.	.	177
3.50-3.99	5	70	1	.	.	123
4.00-4.49	19	8	1	.	77
4.50-4.99	1	9	.	.	27
5.00-5.49	5	.	.	10
5.50-5.99	5
6.00-6.49	0
6.50-6.99	0
7.00+	84	742	2126	1157	535	432	117	23	1	0	0
TOTAL	84	742	2126	1157	535	432	117	23	1	0	0

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 4894.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	389	127	2	.	.	.	.	.	.	602
0.50-0.99	.	204	1413	101	2	.	.	.	.	.	1720
1.00-1.49	.	.	278	468	26	.	.	.	.	.	772
1.50-1.99	.	.	18	185	139	8	.	.	.	.	350
2.00-2.49	.	.	.	42	66	48	.	.	.	.	156
2.50-2.99	.	.	.	2	73	25	1	.	.	.	101
3.00-3.49	3	63	4	.	.	.	72
3.50-3.99	57	19	.	.	.	76
4.00-4.49	2	25	.	.	.	27
4.50-4.99	5	.	.	.	9
5.00-5.49	4	.	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	84	593	1836	800	309	205	54	8	0	0	0
TOTAL	84	593	1836	800	309	205	54	8	0	0	0

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 3647.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	99	622	141	94	3	.	.	.	.	.	862
0.50-0.99	.	284	1622	509	33	.	.	.	.	.	2003
1.00-1.49	.	.	317	206	105	7	.	.	.	.	859
1.50-1.99	.	.	7	34	62	32	.	.	.	.	325
2.00-2.49	68	36	1	.	.	.	128
2.50-2.99	1	56	4	.	.	.	105
3.00-3.49	51	25	.	.	.	61
3.50-3.99	12	.	.	.	56
4.00-4.49	3	.	.	.	12
4.50-4.99	6	.	.	9
5.00-5.49	2	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	99	906	2087	843	272	162	45	8	0	0	0
TOTAL	99	906	2087	843	272	162	45	8	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4144.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	132	751	128	1	1	.	.	.	.	.	1012
0.50-0.99	.	341	1608	64	2	.	.	.	.	.	2014
1.00-1.49	.	.	265	309	24	2	.	.	.	.	600
1.50-1.99	.	.	7	137	80	9	.	.	.	.	233
2.00-2.49	.	.	.	41	32	24	1	.	.	.	97
2.50-2.99	52	24	6	.	.	.	77
3.00-3.49	1	35	12	.	.	.	42
3.50-3.99	14	10	.	.	.	26
4.00-4.49	1	3	.	.	10
4.50-4.99	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	132	1092	2008	552	190	108	30	3	0	0	0
TOTAL	132	1092	2008	552	190	108	30	3	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3859.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	223	913	154								1290
0.50-0.99		420	1591	70							2081
1.00-1.49			315	334	39	1					689
1.50-1.99			8	176	68	8					260
2.00-2.49				40	45	14					99
2.50-2.99				2	63	11					80
3.00-3.49					3	47	3				53
3.50-3.99						24	8	2			34
4.00-4.49						3	19	1			23
4.50-4.99							4	4	1		9
5.00-5.49								2			2
5.50-5.99								2			2
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	223	1333	2068	622	218	108	38	11	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 4335.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	161	674	104								939
0.50-0.99		295	1057	74	2						1428
1.00-1.49			265	273	36	1					575
1.50-1.99			5	132	14						233
2.00-2.49				32	44	27	1				104
2.50-2.99				1	34	11	2				48
3.00-3.49					2	34	3	2			41
3.50-3.99						23	4				27
4.00-4.49							2	1			3
4.50-4.99									1		3
5.00-5.49							2	2			2
5.50-5.99								2	2		4
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	161	969	1431	512	200	110	14	7	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3198.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	194	795	249								1238
0.50-0.99		327	1620	198	11						2156
1.00-1.49			257	410	67	2					736
1.50-1.99			7	116	128	20					271
2.00-2.49				31	44	49					124
2.50-2.99					38	24	2				64
3.00-3.49					1	37	1				39
3.50-3.99						18	8				26
4.00-4.49							8				8
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	194	1122	2133	755	289	150	20	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 4371.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	172	1346	472	1							1991
0.50-0.99		531	3274	448	8						4261
1.00-1.49			445	1027	226	3					1701
1.50-1.99			20	301	377	47					745
2.00-2.49				73	141	104	2				320
2.50-2.99				3	118	54	4				179
3.00-3.49					7	77	1				85
3.50-3.99						36	4				40
4.00-4.49						6	10				16
4.50-4.99							8	1			9
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	172	1877	4211	1853	877	327	29	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 8754.

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	172	1120	305			.	.	.	.	.	1597
0.50-0.99		557	2147	212	3	.	.	.	.	.	2919
1.00-1.49			662	934	109	1	.	.	.	.	1706
1.50-1.99			60	440	270	31	.	.	.	.	801
2.00-2.49				114	152	47	1	.	.	.	314
2.50-2.99				6	186	66	1	.	.	.	258
3.00-3.49					8	140	3	.	.	.	150
3.50-3.99						48	.	.	.	.	51
4.00-4.49						2	23	.	.	.	24
4.50-4.99							3	.	.	.	3
5.00-5.49								2	.	.	2
5.50-5.99									.	.	0
6.00-6.49									.	.	0
6.50-6.99									.	.	0
7.00+									.	.	0
TOTAL	172	1677	3174	1706	728	335	32	2	0	0	7328.
MEAN HS(M) = 1.0	LARGEST HS(M)=		5.0	MEAN TP(SEC)=		4.6	NO. OF CASES=		7328.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	114	619	145								878
0.50-0.99		493	927	90	1						1511
1.00-1.49			260	284	17						562
1.50-1.99			20	195	55	1					273
2.00-2.49				33	111	7					151
2.50-2.99					26		1				30
3.00-3.49						18					18
3.50-3.99						3	1				4
4.00-4.49							1				1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	114	1112	1352	602	210	57	3	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) =		4.4	MEAN TP(SEC) =		4.2	NO. OF CASES =		3234.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	129	666	172	3							970
0.50-0.99		474	743	112	1						1330
1.00-1.49			211	177	27	2					417
1.50-1.99			35	101	41	9					186
2.00-2.49			1	27	82	9					121
2.50-2.99				1	11	10	2				24
3.00-3.49						9					9
3.50-3.99					2	1					3
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	129	1140	1162	421	164	40	4	0	0	0	2872
MEAN HS(M) = 0.8	LARGEST HS(M) =		3.7	MEAN TP(SEC) =		4.0	NO. OF CASES =		2872.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	131	752	279	8							1170
0.50-0.99		537	1180	210	18						1945
1.00-1.49			345	344	96	14					799
1.50-1.99			32	183	93	39	2				349
2.00-2.49				53	75	36	8				172
2.50-2.99				5	41	28	5				79
3.00-3.49					3	21	4	9	1		38
3.50-3.99								5			15
4.00-4.49									1		2
4.50-4.99							2				0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	131	1289	1836	803	326	142	28	14	2	0	4289

MEAN HS(M) = 0.9 LARGEST HS(M) = 4.5 MEAN TP(SEC) = 4.4 NO. OF CASES = 4289.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	179	1555	852	12	.	.	.	.	.	.	2598
0.50-0.99	.	648	4635	1207	14	25	1	.	.	.	6504
1.00-1.49	.	.	872	1591	487	25	1	.	.	.	2976
1.50-1.99	.	.	67	556	471	295	3	.	.	.	1392
2.00-2.49	.	.	1	201	248	378	60	4	.	.	892
2.50-2.99	.	.	.	6	203	174	114	34	.	.	531
3.00-3.49	20	155	85	58	10	.	328
3.50-3.99	65	67	45	9	1	187
4.00-4.49	7	42	38	11	2	100
4.50-4.99	7	36	24	1	68
5.00-5.49	14	19	4	37
5.50-5.99	1	17	1	18
6.00-6.49	9	1	11
6.50-6.99	1	1	2
7.00+	4	4
TOTAL	179	2203	6427	3573	1443	1099	379	230	100	15	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.0 NO. OF CASES= 14653.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	164	1460	398	3	.	.	.	.	.	.	2025
0.50-0.99	.	515	3491	444	2	1	.	.	.	.	4452
1.00-1.49	.	.	710	1546	206	1	.	.	.	.	2463
1.50-1.99	.	.	38	601	575	125	1	.	.	.	1340
2.00-2.49	.	.	.	193	291	243	16	1	.	.	744
2.50-2.99	.	.	.	3	204	161	52	21	1	.	442
3.00-3.49	8	219	47	14	1	.	289
3.50-3.99	90	58	28	14	.	190
4.00-4.49	2	38	28	13	1	82
4.50-4.99	7	31	13	.	51
5.00-5.49	2	6	12	4	24
5.50-5.99	11	.	11
6.00-6.49	5	3	8
6.50-6.99	1	1
7.00+
TOTAL	164	1975	4637	2790	1286	841	221	129	70	10	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 11358.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	103	819	210	.	.	.	.	.	.	.	1132
0.50-0.99	.	364	2243	187	.	.	.	.	.	.	2794
1.00-1.49	.	.	483	1073	60	1	.	.	.	.	1617
1.50-1.99	.	.	37	473	466	10	.	.	.	.	986
2.00-2.49	.	.	.	127	224	124	1	.	.	.	476
2.50-2.99	.	.	.	2	212	152	4	.	.	.	370
3.00-3.49	4	236	11	1	.	.	252
3.50-3.99	137	60	2	.	.	199
4.00-4.49	1	47	4	.	.	52
4.50-4.99	1	9	8	2	.	20
5.00-5.49	3	1	.	4
5.50-5.99	5	1	.	6
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	103	1183	2973	1862	966	662	132	23	4	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 5.0 NO. OF CASES= 7410.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	79	475	151	3	.	.	.	.	.	.	708
0.50-0.99	.	240	1521	109	2	.	.	.	.	.	1872
1.00-1.49	.	.	422	676	51	.	.	.	.	.	1149
1.50-1.99	.	.	38	382	249	17	.	.	.	.	686
2.00-2.49	.	.	.	131	157	67	.	.	.	.	355
2.50-2.99	.	.	.	3	186	86	.	.	.	.	275
3.00-3.49	12	225	6	.	.	.	243
3.50-3.99	108	23	.	.	.	131
4.00-4.49	5	63	.	.	.	68
4.50-4.99	9	4	.	.	13
5.00-5.49	2	.	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	79	715	2132	1304	657	508	101	7	0	0	

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 5.0 NO. OF CASES= 5158.

STATION S38 47.53N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

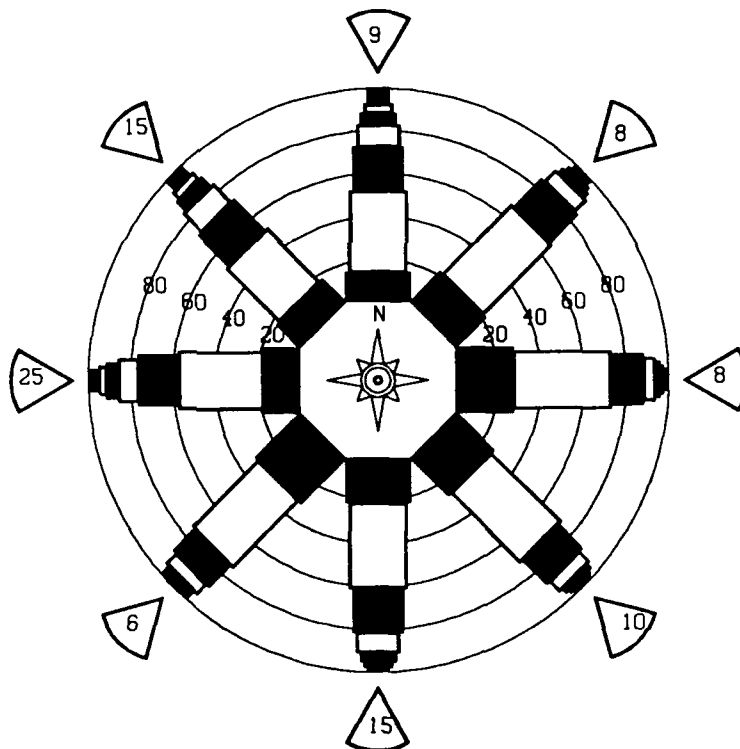
HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	222	1347	403	3	7	.	.	.	.	.	1975
0.50-0.99	.	646	3066	375	.	.	.	.	.	.	4094
1.00-1.49	.	.	647	1058	155	5	.	.	.	.	1865
1.50-1.99	.	.	44	447	341	66	.	.	.	.	898
2.00-2.49	.	.	.	130	189	130	9	.	.	.	458
2.50-2.99	.	.	.	3	168	95	19	5	.	.	290
3.00-3.49	8	154	18	8	1	.	189
3.50-3.99	76	32	7	2	.	118
4.00-4.49	3	37	8	4	.	49
4.50-4.99	8	10	3	.	22
5.00-5.49	5	3	.	8
5.50-5.99	1	3	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	222	1993	4160	2016	868	529	123	44	16	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.7 TOTAL CASES= 93504.

STATION 38
47.53N, 87.50 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S38 (47.53N 87.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.2	1.1	1.1	0.8	0.6	0.6	0.5	0.7	1.2	1.4	1.3	0.9
1957	1.5	1.4	1.1	1.1	1.0	0.7	0.6	0.7	0.9	0.9	1.4	1.5	1.1
1958	1.0	1.5	0.6	1.0	0.9	0.8	0.6	0.6	0.9	1.1	1.7	1.2	1.0
1959	1.0	1.1	0.9	0.8	0.8	0.6	0.5	0.6	0.8	0.9	1.4	1.5	0.9
1960	1.3	1.2	0.9	1.0	0.8	0.5	0.5	0.6	0.7	1.0	1.5	1.2	1.0
1961	1.0	1.1	1.3	0.9	0.8	0.6	0.4	0.5	0.9	1.0	1.1	1.2	0.9
1962	1.5	1.1	0.8	0.8	0.7	0.5	0.5	0.5	0.6	0.8	0.0	1.4	0.9
1963	1.3	1.4	1.3	0.9	0.7	0.6	0.6	0.6	0.7	0.9	1.3	1.3	1.0
1964	1.4	1.3	1.4	1.2	0.9	0.7	0.6	0.8	1.0	1.2	1.2	1.2	1.1
1965	1.8	1.1	1.2	0.9	0.8	0.7	0.6	0.9	1.4	1.1	1.8	1.7	1.2
1966	1.7	1.8	2.0	1.2	1.3	0.7	0.7	0.7	1.0	1.7	1.9	1.8	1.4
1967	1.8	1.1	1.6	1.2	1.1	0.8	0.7	0.8	1.1	1.9	1.1	2.1	1.4
1968	1.6	2.5	1.8	1.3	1.0	0.8	0.8	0.8	0.9	1.7	1.9	1.8	1.4
1969	2.0	1.2	1.5	1.0	0.9	0.7	0.6	0.8	1.0	1.4	1.5	1.3	1.1
1970	1.4	1.6	1.2	1.3	1.0	0.7	0.6	0.7	1.2	1.6	1.7	1.4	1.2
1971	1.4	1.4	1.2	1.0	0.8	0.5	0.6	0.8	1.3	1.5	1.1	1.2	1.1
1972	1.6	1.2	1.3	0.8	0.5	0.5	0.5	0.6	1.0	1.3	2.2	1.3	1.1
1973	1.3	1.3	1.4	1.0	0.6	0.6	0.6	0.6	1.1	1.1	1.5	1.2	1.0
1974	1.1	0.9	1.3	0.9	0.7	0.6	0.6	0.7	0.9	1.1	1.3	1.2	1.0
1975	1.2	1.1	1.2	0.6	0.6	0.7	0.6	0.7	0.9	1.4	1.1	1.2	1.0
1976	1.6	1.5	1.7	1.1	0.8	0.7	0.5	0.6	0.8	0.8	1.1	1.2	1.0
1977	1.5	1.1	1.4	0.7	0.5	0.6	0.6	0.6	0.8	1.1	1.2	1.4	1.1
1978	1.4	1.1	1.0	1.0	0.7	0.6	0.5	0.7	0.9	1.1	1.3	1.3	1.1
1979	1.2	1.0	1.3	0.8	0.7	0.6	0.5	0.6	0.9	1.1	1.4	1.4	1.0
1980	1.3	0.9	1.2	0.8	0.7	0.6	0.5	0.6	1.0	1.4	0.0	1.4	0.9
1981	1.1	1.1	1.1	0.9	0.6	0.4	0.4	0.9	1.1	1.2	1.1	1.0	0.9
1982	1.9	1.3	1.7	1.1	0.7	0.6	0.5	0.5	0.9	1.1	1.1	1.5	1.1
1983	1.4	1.1	1.6	0.8	0.8	0.6	0.5	0.5	0.8	1.1	1.1	1.5	1.0
1984	1.2	1.3	1.4	1.0	0.6	0.6	0.6	0.6	0.9	1.1	1.1	1.5	1.0
1985	1.6	1.1	1.6	0.9	0.6	0.7	0.5	0.5	0.8	1.1	1.1	1.5	1.0
1986	1.4	0.9	1.3	1.1	0.6	0.6	0.5	0.6	0.9	0.9	1.3	1.3	0.9
1987	1.2	1.2	1.4	0.8	0.6	0.5	0.5	0.6	0.6	1.1	1.3	1.2	0.9
MEAN	1.4	1.3	1.3	1.0	0.8	0.6	0.6	0.6	0.9	1.2	1.4	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S38 (47.53N 87.50W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	4.0	5.7	3.8	2.6	1.7	1.4	1.5	2.7	4.8	3.3	4.2	
1957	3.3	3.0	3.7	3.3	2.2	1.7	1.4	1.1	2.7	2.9	3.3	3.0	
1958	3.3	3.0	3.3	3.3	3.3	1.1	1.1	1.1	3.3	3.3	3.3	3.3	
1959	3.3	3.0	3.3	3.3	3.3	1.1	1.1	1.1	3.3	3.3	3.3	3.3	
1960	3.3	3.0	3.3	3.3	3.3	1.1	1.1	1.1	3.3	3.3	3.3	3.3	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1965	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1966	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1973	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1974	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1975	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1976	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1977	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1978	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1979	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1980	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1981	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1984	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1985	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S38

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	271.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031400

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 0.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	154	678	302	6							1140
0.50-0.99		310	1772	235	2						2319
1.00-1.49			451	653	111	3					1218
1.50-1.99			54	328	207	25					614
2.00-2.49				161	134	103					398
2.50-2.99				8	237	70	3				318
3.00-3.49					9	196	8				255
3.50-3.99						128	27				198
4.00-4.49						10	86				98
4.50-4.99							42	23			65
5.00-5.49							1	19			20
5.50-5.99								10			10
6.00-6.49								3			4
6.50-6.99									1		1
7.00+											0
TOTAL	154	988	2579	1391	700	535	167	57	2	0	6161.

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 6161.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	136	520	248	4							908
0.50-0.99		244	1522	133	3						1902
1.00-1.49			290	499	49						838
1.50-1.99			23	183	152	8					366
2.00-2.49				59	77	41					177
2.50-2.99					87	32	2				121
3.00-3.49					3	69	3				75
3.50-3.99						52	34				86
4.00-4.49						1	34	2			37
4.50-4.99							11	4			15
5.00-5.49								7			7
5.50-5.99								1			1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	136	764	2083	878	371	203	84	14	0	0	4253.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 4253.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	152	741	234	6							1133
0.50-0.99		293	1663	128	2						2086
1.00-1.49			304	512	32	1					849
1.50-1.99			4	228	112	5					349
2.00-2.49				52	70	31					153
2.50-2.99					74	31	1				109
3.00-3.49					2	34	2				82
3.50-3.99						75	28				62
4.00-4.49						34	13				14
4.50-4.99						1	2				6
5.00-5.49								4			5
5.50-5.99								5			1
6.00-6.49								1			0
6.50-6.99											0
7.00+											0
TOTAL	152	1034	2205	926	292	181	49	10	0	0	4545.

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 4545.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	192	857	227	2							1278
0.50-0.99		347	1579	84							2010
1.00-1.49			305	312	21						638
1.50-1.99			4	148	77	7					236
2.00-2.49				40	40	27					107
2.50-2.99					48	18	1				67
3.00-3.49					2	44	2				48
3.50-3.99						17	3				20
4.00-4.49						5	3				8
4.50-4.99							2				3
5.00-5.49								1			0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	192	1204	2115	586	188	118	11	1	0	0	4139.

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 4139.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	272	925	223	2	.	.	.	.	.	.	1422
0.50-0.99	.	403	1494	74	.	.	.	.	.	.	1971
1.00-1.49	.	.	322	317	28	1	.	.	.	.	668
1.50-1.99	.	.	4	186	56	4	.	.	.	.	250
2.00-2.49	.	.	.	53	44	13	.	.	.	.	110
2.50-2.99	66	10	.	1	.	.	81
3.00-3.49	3	53	1	.	.	.	57
3.50-3.99	29	2	2	.	.	33
4.00-4.49	8	5	.	.	.	13
4.50-4.99	3	.	.	.	3
5.00-5.49	1	1	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	272	1328	2043	632	197	118	16	4	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4323.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	212	654	161	3	.	.	.	.	.	.	1030
0.50-0.99	.	299	1100	65	1	.	.	.	.	.	1465
1.00-1.49	.	.	260	283	38	2	.	.	.	.	583
1.50-1.99	.	.	5	140	88	9	.	.	.	.	242
2.00-2.49	.	.	.	38	52	21	1	.	.	.	112
2.50-2.99	.	.	.	1	36	10	2	.	.	.	49
3.00-3.49	3	28	2	1	.	.	34
3.50-3.99	24	8	.	.	.	32
4.00-4.49	3	1	.	.	4
4.50-4.99	1	1	1	.	3
5.00-5.49	1	1	2	.	4
5.50-5.99	2	.	2
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	212	953	1526	530	218	94	18	5	5	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 3342.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	224	881	317	8	.	.	.	.	.	.	1430
0.50-0.99	.	376	1578	196	4	.	.	.	.	.	2154
1.00-1.49	.	.	250	394	51	4	.	.	.	.	699
1.50-1.99	.	.	8	141	137	13	.	.	.	.	299
2.00-2.49	.	.	.	25	45	43	.	.	.	.	113
2.50-2.99	.	.	.	1	32	25	.	.	.	.	58
3.00-3.49	31	.	.	.	.	32
3.50-3.99	19	1	.	.	.	24
4.00-4.49	6	.	.	.	6
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	224	1257	2153	765	269	135	12	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4514.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	210	1560	609	10	.	.	.	.	.	.	2389
0.50-0.99	.	567	3377	500	3	.	.	.	.	.	4447
1.00-1.49	.	.	522	929	177	3	.	.	.	.	1631
1.50-1.99	.	.	24	385	314	26	.	.	.	.	749
2.00-2.49	.	.	.	103	174	48	.	.	.	.	325
2.50-2.99	.	.	.	1	159	33	.	.	.	.	193
3.00-3.49	6	77	.	.	.	.	83
3.50-3.99	41	4	.	.	.	45
4.00-4.49	4	9	.	.	.	13
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	210	2127	4532	1928	833	232	14	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 9246.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	240	1381	491	12							2124
0.50-0.99		597	2340	177	5						3119
1.00-1.49			795	713	83						1591
1.50-1.99			69	607	180	14					870
2.00-2.49				161	154	25					340
2.50-2.99				4	294	26	1				325
3.00-3.49					9	127					136
3.50-3.99						44					44
4.00-4.49						17	6		1		24
4.50-4.99							4				4
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	240	1978	3695	1674	725	253	11	0	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 8033.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	177	774	300	8							1259
0.50-0.99		467	1329	109	3						1908
1.00-1.49			597	205	17	1					820
1.50-1.99			55	372	23	7					457
2.00-2.49				198	65	2					265
2.50-2.99				5	117	1					123
3.00-3.49					18	28					46
3.50-3.99						12					12
4.00-4.49											0
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	177	1241	2281	897	243	51	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 4583.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	235	776	362	17	1						1391
0.50-0.99		500	1268	159	6						1933
1.00-1.49			541	221	29						792
1.50-1.99			39	321	19	4					383
2.00-2.49				168	44		1				213
2.50-2.99				2	93						96
3.00-3.49					17	7					24
3.50-3.99						8					8
4.00-4.49						2					2
4.50-4.99							2				2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	235	1277	2210	888	209	22	3	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4539.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	214	806	402	14							1436
0.50-0.99		672	763	177	7	1					1620
1.00-1.49			223	252	32	3	1				512
1.50-1.99			57	130	41	6	1	1		1	236
2.00-2.49			6	47	18	4			1		76
2.50-2.99				2	22	3					27
3.00-3.49					5	6				1	12
3.50-3.99						1					1
4.00-4.49							1				2
4.50-4.99											1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	214	1478	1451	622	125	25	4	1	1	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3679.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) -270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5271.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 9324.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 10856.

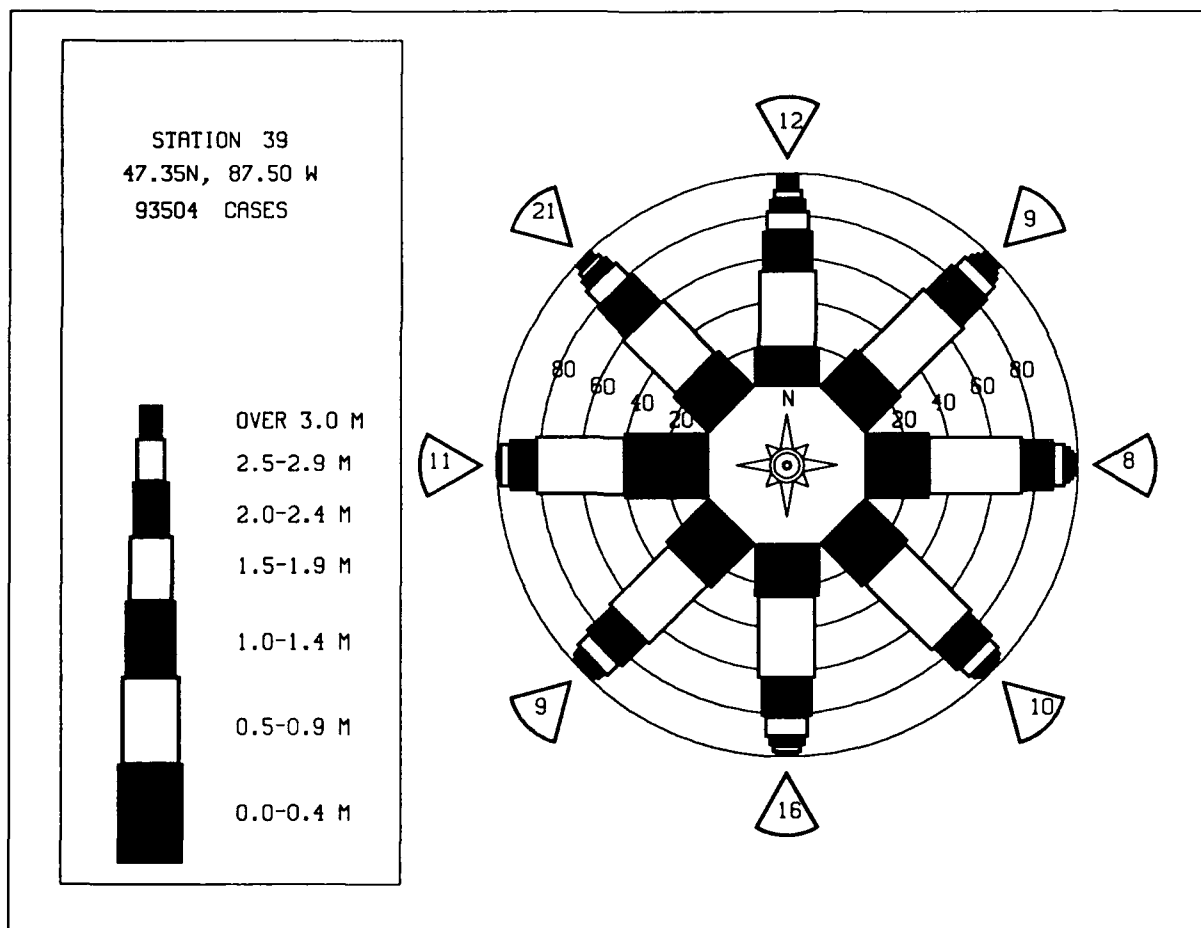
STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 6696.

STATION S39 47.35N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	363	1462	778	34	2	.	.	.	.	.	2639
0.50-0.99	.	834	2625	468	44	9	.	.	.	.	3981
1.00-1.49	.	.	646	773	183	45	11	3	.	.	1661
1.50-1.99	.	.	62	433	231	55	8	8	2	.	799
2.00-2.49	.	.	2	153	130	67	6	7	3	.	368
2.50-2.99	.	.	.	6	177	51	5	2	2	.	243
3.00-3.49	11	132	4	1	.	.	148
3.50-3.99	61	17	1	.	.	78
4.00-4.49	7	25	1	.	.	33
4.50-4.99	8	.	.	.	13
5.00-5.49	3	.	.	3
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	363	2296	4113	1868	778	427	84	32	7	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S39 (47.35N 87.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	0.9	1.0	1.0	0.7	0.6	0.5	0.4	0.7	1.1	1.3	1.2	0.8
1957	1.3	1.2	0.9	0.9	0.9	0.7	0.6	0.6	0.8	0.8	1.1	1.3	0.8
1958	0.9	1.5	0.6	0.8	0.8	0.7	0.5	0.5	0.8	0.9	1.5	1.0	0.9
1959	0.9	0.9	0.8	0.7	0.8	0.5	0.4	0.5	0.7	0.9	1.1	1.3	0.9
1960	1.2	1.2	0.9	0.9	0.9	0.5	0.4	0.6	0.6	0.9	1.3	1.0	0.9
1961	0.8	0.9	1.2	0.8	0.7	0.5	0.4	0.4	0.8	0.9	1.1	1.0	0.8
1962	1.2	1.0	0.8	0.8	0.7	0.5	0.4	0.5	0.6	0.7	1.1	1.3	0.8
1963	1.1	1.2	1.2	0.9	0.7	0.6	0.5	0.5	0.7	0.8	1.1	1.2	0.9
1964	1.3	1.2	1.4	1.1	0.8	0.6	0.5	0.7	0.9	1.0	1.0	1.0	0.0
1965	1.6	1.5	1.4	1.1	0.9	0.8	0.7	0.6	0.8	1.4	1.5	1.1	0.8
1966	1.4	1.7	2.0	1.1	1.1	0.6	0.6	0.6	0.9	1.4	1.9	1.1	1.1
1967	1.7	1.7	1.4	1.1	1.0	0.7	0.6	0.7	1.0	1.6	1.4	1.1	1.1
1968	1.5	2.1	1.6	1.2	1.0	0.7	0.7	0.7	0.8	1.5	1.8	1.7	1.1
1969	1.7	1.1	1.5	1.1	1.0	0.7	0.9	0.7	0.9	1.1	1.3	1.3	1.1
1970	1.4	1.6	1.2	1.2	1.0	0.7	0.9	0.6	1.1	1.6	1.6	1.4	1.1
1971	1.1	1.1	1.1	0.9	0.7	0.5	0.5	0.5	0.7	1.1	1.3	0.9	0.9
1972	1.2	1.0	1.2	0.7	0.9	0.5	0.5	0.5	0.9	1.1	1.1	1.1	0.0
1973	1.2	1.2	1.4	1.0	0.9	0.5	0.5	0.5	0.8	1.1	1.3	1.2	0.0
1974	1.0	0.9	1.1	0.9	0.7	0.6	0.6	0.6	0.7	1.1	1.1	1.1	0.0
1975	1.2	0.8	1.1	0.6	0.5	0.6	0.6	0.6	0.8	1.1	1.2	1.1	0.0
1976	1.5	1.4	1.7	1.1	0.8	0.7	0.6	0.6	0.7	0.0	0.9	1.1	0.0
1977	1.1	1.4	1.2	0.9	0.7	0.5	0.5	0.5	0.7	0.0	1.1	1.1	0.0
1978	1.1	0.0	0.8	0.0	0.9	0.6	0.6	0.6	0.8	0.0	1.1	1.1	0.0
1979	1.1	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.8	0.0	1.1	1.1	0.0
1980	1.1	0.8	1.0	0.8	0.6	0.6	0.6	0.6	0.9	1.1	1.1	1.1	0.0
1981	0.9	1.1	1.0	0.0	0.0	0.6	0.6	0.6	0.8	1.1	1.1	1.1	0.0
1982	1.6	1.1	1.4	1.0	0.8	0.6	0.6	0.6	0.9	1.1	1.1	1.1	0.0
1983	1.4	1.1	1.6	1.8	0.8	0.6	0.6	0.6	0.9	1.1	1.1	1.1	0.0
1984	1.4	1.2	1.4	1.0	0.8	0.6	0.6	0.6	0.8	1.0	1.4	1.4	0.0
1985	1.3	1.2	1.4	0.8	0.6	0.6	0.6	0.6	0.7	1.0	1.0	1.2	0.0
1986	1.3	0.8	1.2	1.0	0.6	0.6	0.6	0.6	0.7	0.8	1.1	1.1	0.0
1987	1.1	1.0	1.3	0.7	0.6	0.4	0.5	0.5	0.6	1.0	1.2	1.0	0.8
MEAN	1.2	1.2	1.2	0.9	0.7	0.6	0.5	0.5	0.8	1.1	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S39 (47.35N 87.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.1	3.8	6.0	3.8	2.4	1.6	1.2	1.3	2.8	3.7	3.7	4.4	
1957	3.4	3.4	3.2	3.5	2.6	2.3	2.1	1.7	3.4	3.0	4.6	4.3	
1958	3.3	3.4	3.1	3.7	2.0	1.9	1.4	1.7	2.7	2.2	3.9	3.1	
1959	2.8	2.7	3.9	2.3	2.6	1.3	1.4	1.3	2.7	3.1	3.3	4.4	
1960	3.3	3.9	4.0	2.4	3.3	1.2	1.5	1.7	2.5	3.7	4.5	3.0	
1961	3.9	3.1	3.7	2.5	2.7	1.5	1.9	3.4	3.5	3.5	3.5	3.5	
1962	3.8	3.7	3.1	3.3	2.1	1.2	1.6	2.3	2.0	2.5	3.0	3.7	
1963	2.8	4.1	4.6	3.6	1.9	1.7	1.8	2.8	2.5	4.0	4.0	4.5	
1964	3.9	3.7	4.0	4.3	2.3	2.2	1.2	2.5	2.8	3.7	2.6	3.1	
1965	4.5	5.1	4.6	3.1	1.8	2.1	2.1	2.4	2.4	4.4	5.3	5.3	
1966	4.3	4.5	5.6	3.8	3.6	1.9	2.2	2.0	3.2	4.7	6.7	4.4	
1967	5.1	4.4	4.3	3.8	3.5	2.5	3.4	2.7	3.4	4.2	3.9	4.7	
1968	4.6	5.8	5.8	4.7	2.7	2.3	3.1	2.8	2.5	4.2	5.0	5.9	
1969	4.3	5.2	5.7	3.8	2.8	2.7	1.9	3.1	3.2	3.6	3.7	4.7	
1970	4.7	4.8	3.7	4.0	2.9	1.8	2.8	1.9	4.2	4.4	4.6	4.8	
1971	3.4	4.0	4.2	3.0	3.1	1.7	1.6	1.2	2.4	4.3	4.5	3.6	
1972	4.7	3.9	4.4	2.8	1.3	1.5	1.3	1.7	3.5	5.2	3.5	4.8	
1973	4.0	3.8	4.6	2.6	3.3	1.2	1.8	1.4	2.7	3.4	3.7	3.9	
1974	3.3	4.3	3.1	3.1	2.7	1.7	1.3	1.9	1.8	3.0	3.4	3.9	
1975	4.7	2.4	3.8	1.4	2.1	1.7	2.3	2.9	2.8	4.0	5.3	3.9	
1976	4.4	4.6	5.1	3.6	3.0	3.0	1.3	1.9	2.9	2.7	3.4	4.2	
1977	3.5	4.5	3.8	3.1	1.5	1.4	2.3	1.6	4.0	2.9	3.8	4.5	
1978	5.0	3.7	3.2	3.0	3.4	2.0	1.7	2.2	2.5	3.6	3.5	3.9	
1979	3.3	3.5	4.7	3.7	2.7	1.9	1.2	2.2	2.7	4.9	3.4	3.4	
1980	4.8	3.4	3.4	3.2	1.6	1.4	1.3	2.1	3.5	3.5	3.0	3.6	
1981	2.8	3.0	3.2	2.6	2.5	3.1	1.6	1.3	3.7	4.0	4.1	3.0	
1982	5.7	2.6	4.9	4.2	1.8	1.5	2.0	1.2	3.1	5.1	4.3	3.5	
1983	4.8	5.3	4.9	2.1	2.4	1.9	2.6	1.6	2.0	3.2	4.5	4.4	
1984	3.9	4.5	5.5	3.8	3.2	2.5	1.4	1.3	2.7	3.2	4.3	4.7	
1985	4.5	3.8	5.2	3.8	2.1	2.5	1.1	1.8	2.6	3.2	2.8	5.6	
1986	4.3	2.7	4.5	3.0	3.6	1.5	0.9	1.3	2.7	3.5	3.9	2.9	
1987	3.3	6.0	4.0	3.2	2.0	1.0	1.7	1.6	2.6	4.7	3.9	4.2	

32 YR. STATISTICS FOR WIS STATION S39

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	7.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112809

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	485	875	664	87	4	25	1	.	.	.	2115
0.50-0.99	.	930	516	511	147	25	13	1	.	.	2130
1.00-1.49	.	.	316	182	217	149	13	1	.	.	878
1.50-1.99	.	.	136	20	86	212	83	11	.	.	548
2.00-2.49	.	.	20	8	7	39	67	55	3	.	199
2.50-2.99	.	.	.	6	.	3	6	29	6	.	50
3.00-3.49	.	.	.	2	.	.	1	1	3	.	7
3.50-3.99	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	485	1805	1652	816	461	428	171	97	15	0	5562.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5562.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	357	632	427	32	3	.	.	.	.	.	1451
0.50-0.99	.	493	650	313	53	3	.	.	.	.	1512
1.00-1.49	.	.	121	171	111	24	2	.	.	.	429
1.50-1.99	.	.	12	55	55	64	6	.	.	.	192
2.00-2.49	.	.	.	17	12	25	14	6	.	.	74
2.50-2.99	.	.	.	1	20	12	8	3	.	.	44
3.00-3.49	4	13	4	.	.	.	21
3.50-3.99	5	4	3	.	.	12
4.00-4.49	1	5	2	.	.	8
4.50-4.99	1	3	.	.	4
5.00-5.49	1	1	.	2
5.50-5.99	1	1	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	357	1125	1210	589	258	147	44	19	2	0	3522.

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3522.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	407	820	424	23	2	1	.	.	.	.	1677
0.50-0.99	.	472	1146	268	22	1	.	.	.	.	1909
1.00-1.49	.	.	296	322	70	3	.	.	.	.	691
1.50-1.99	.	.	21	171	126	20	1	.	.	.	339
2.00-2.49	.	.	.	47	45	45	4	.	.	.	141
2.50-2.99	.	.	.	3	48	22	8	.	.	.	81
3.00-3.49	2	50	6	2	.	.	60
3.50-3.99	17	16	3	.	.	36
4.00-4.49	5	5	.	.	10
4.50-4.99	3	3	1	.	7
5.00-5.49	1	.	1
5.50-5.99	2	.	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	407	1292	1887	834	315	159	43	15	3	0	4646.

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4646.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	363	734	314	18	1	.	.	.	.	.	1430
0.50-0.99	.	417	1297	150	5	.	.	.	.	.	1869
1.00-1.49	.	.	295	280	22	1	.	.	.	.	598
1.50-1.99	.	.	11	145	89	11	.	.	.	.	256
2.00-2.49	.	.	.	37	43	25	1	.	.	.	106
2.50-2.99	59	28	7	2	.	.	96
3.00-3.49	2	45	7	2	.	.	56
3.50-3.99	24	10	3	.	.	37
4.00-4.49	1	12	4	.	.	17
4.50-4.99	1	7	.	.	8
5.00-5.49	6	.	.	6
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	363	1151	1917	630	221	135	38	24	1	0	4205.

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4205.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	518	1083	309	12	.	.	.	.	.	.	1922
0.50-0.99	.	519	1555	98	2	1	.	.	.	.	2174
1.00-1.49	.	.	441	332	29	1	.	.	.	.	803
1.50-1.99	.	.	9	231	72	5	.	.	.	.	317
2.00-2.49	.	.	.	64	44	9	.	.	.	.	117
2.50-2.99	.	.	.	1	73	21	4	1	.	.	100
3.00-3.49	2	53	3	3	.	.	61
3.50-3.99	23	16	2	1	.	42
4.00-4.49	2	20	8	.	.	30
4.50-4.99	4	9	2	.	15
5.00-5.49	7	1	.	8
5.50-5.99	3	3	.	6
6.00-6.49	1	.	1
6.50-6.99	2	.	2
7.00+	0
TOTAL	518	1602	2314	738	222	114	47	33	10	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5249.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	401	689	207	10	.	1	.	.	.	.	1307
0.50-0.99	.	343	1219	74	4	1	.	.	.	.	1641
1.00-1.49	.	.	337	317	35	1	.	.	.	.	690
1.50-1.99	.	.	10	209	93	13	.	.	.	.	325
2.00-2.49	.	.	.	50	49	18	.	.	.	.	117
2.50-2.99	.	.	.	2	39	19	3	.	.	.	63
3.00-3.49	1	28	.	3	.	.	32
3.50-3.99	35	12	2	.	.	49
4.00-4.49	13	1	.	.	14
4.50-4.99	1	2	.	.	3
5.00-5.49	5	1	1	7
5.50-5.99	1	1	.	2
6.00-6.49	4	.	4
6.50-6.99	0
7.00+	0
TOTAL	401	1032	1773	662	221	115	29	14	6	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 3991.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	351	868	464	19	.	.	.	.	.	.	1702
0.50-0.99	.	449	1581	244	16	.	.	.	.	.	2290
1.00-1.49	.	.	293	439	65	2	.	.	.	.	799
1.50-1.99	.	.	12	181	120	17	.	.	.	.	330
2.00-2.49	.	.	.	42	54	37	.	.	.	.	133
2.50-2.99	32	16	1	.	.	.	49
3.00-3.49	47	.	.	.	.	47
3.50-3.99	14	1	1	.	.	16
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	351	1317	2350	925	287	133	2	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 5027.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	423	1190	1008	91	.	.	.	.	.	.	2712
0.50-0.99	.	773	2402	897	53	.	.	.	.	.	4125
1.00-1.49	.	.	875	517	250	9	.	.	.	.	1651
1.50-1.99	.	.	132	469	136	20	1	.	.	.	758
2.00-2.49	.	.	.	272	37	17	.	.	.	.	326
2.50-2.99	.	.	.	40	60	8	.	.	.	.	108
3.00-3.49	14	16	.	1	.	.	31
3.50-3.99	2	11	3	.	.	.	16
4.00-4.49	1	3	.	.	.	4
4.50-4.99	1	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	423	1963	4417	2286	552	82	7	1	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 9113.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	520	1072	249	21							1862
0.50-0.99		778	1544	112	14	2	.	.	.	.	2450
1.00-1.49	.	.	973	83	36	7	.	.	.	.	1094
1.50-1.99	.	.	148	434	5		.	.	.	.	592
2.00-2.49	.	.	.	412	5	5	.	.	.	.	422
2.50-2.99	.	.	.	37	78	1	.	.	.	.	116
3.00-3.49	.	.	.	.	35		.	.	.	.	39
3.50-3.99	.	.	.	.	1	7	.	.	.	.	1
4.00-4.49	.	.	.	.	.	1	.	.	.	.	1
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	520	1850	2914	1099	172	29	0	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M)= 4.0		MEAN TP(SEC)= 4.0		NO. OF CASES= 6166.						

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	425	821	163	11	.	.	.	.	.	.	1420
0.50-0.99	.	590	1078	67	5	.	.	.	.	.	1740
1.00-1.49	.	.	716	39	14	6	.	.	.	.	775
1.50-1.99	.	.	85	297	6	5	.	.	.	.	393
2.00-2.49	.	.	.	188	4	2	.	.	.	.	194
2.50-2.99	.	.	.	19	52	.	.	.	.	.	71
3.00-3.49	17	.	.	.	.	.	17
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	425	1411	2042	621	98	15	0	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		3.6	MEAN TP(SEC)=		3.8	NO. OF CASES=		4321.		

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	476	858	186	33	2	.	.	.	.	.	1555
0.50-0.99	.	590	1363	70	7	.	.	.	.	.	2030
1.00-1.49	.	.	920	78	18	4	.	.	.	.	1020
1.50-1.99	.	.	83	382	2	3	1	.	.	.	471
2.00-2.49	.	.	.	180	18	.	.	.	.	.	198
2.50-2.99	.	.	.	28	16	.	.	.	.	.	44
3.00-3.49	9	2	.	.	.	.	11
3.50-3.99	2	.	.	.	.	.	2
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	476	1448	2552	771	74	10	1	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		4.1	MEAN TP(SEC)=		3.9	NO. OF CASES=		4995.		

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	598	1007	162	29	7	1	.	.	.	.	1804
0.50-0.99	.	1351	1750	67	8	.	.	.	.	.	3176
1.00-1.49	.	.	1393	71	17	3	.	.	.	.	1484
1.50-1.99	.	.	291	388	6	3	.	.	.	.	688
2.00-2.49	.	.	.	237	11	.	.	.	.	.	248
2.50-2.99	.	.	.	14	22	.	.	.	.	.	36
3.00-3.49	9	1	.	.	.	.	10
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	598	2358	3596	806	80	12	0	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M) = 4.4		MEAN TP(SEC) = 3.8		NO. OF CASES = 6978.						

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	990	1249	306	49	7						2601
0.50-0.99		2064	1726	87	12	1					3890
1.00-1.49			1412	20	34	1					1467
1.50-1.99			406	361	8	5					780
2.00-2.49				170	1						171
2.50-2.99				13	1			1			15
3.00-3.49											0
3.50-3.99					1						1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	990	3313	3850	700	64	7	0	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 8353.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	890	1533	428	71	9	4					2935
0.50-0.99		2500	1387	152	28	5					4072
1.00-1.49			1146	29	35	1					1216
1.50-1.99			466	236	5	3		1			711
2.00-2.49				93							93
2.50-2.99				8	3						11
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	890	4033	3427	589	81	17	1	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 8462.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	737	1205	546	94	7						2589
0.50-0.99		2291	963	148	58	36	1				3497
1.00-1.49			934	26	31	18	4				1015
1.50-1.99			429	45	8	9	3	2			496
2.00-2.49				36							36
2.50-2.99				2							2
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	737	3496	2872	352	104	63	8	4	0	0	

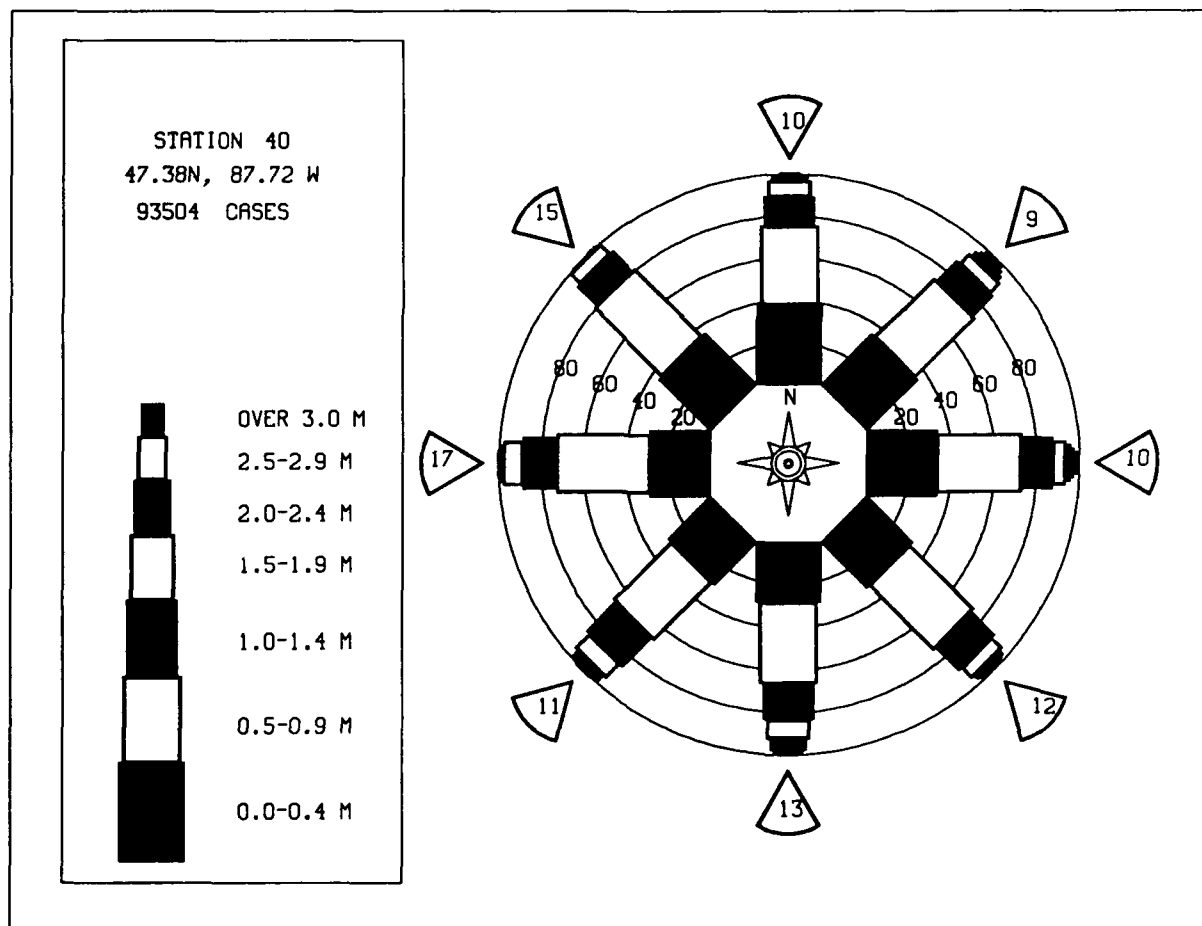
MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 7151.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	534	986	548	97	8	4					2177
0.50-0.99		1518	581	315	115	53					2583
1.00-1.49			562	122	90	113	27	1			846
1.50-1.99			334	25	22	45	47	18			491
2.00-2.49			8	18		2	5	11	1		45
2.50-2.99				4				2			7
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	534	2504	2034	511	235	217	80	32	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 5763.

STATION S40 47.38N 87.72W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT (METRES)	PEAK PERIOD (SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER
0.00-0.49	848	1562	641	70	5	1	.	.	.	3127
0.50-0.99	.	1608	2076	358	108	12	.	.	.	4109
1.00-1.49	.	.	1104	296	84	34	.	.	.	1546
1.50-1.99	.	.	259	365	33	44	14	3	.	769
2.00-2.49	.	.	2	187	50	22	3	1	.	280
2.50-2.99	.	.	.	18	9	13	6	1	.	87
3.00-3.49	26	6	1	.	38
3.50-3.99	14	6	2	.	21
4.00-4.49	1	2	.	3
4.50-4.99	2	.	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	848	3170	4082	1294	344	166	45	21	0	0
MEAN HS(M)= 0.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S40 (47.38N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	0.9	1.0	0.9	0.7	0.5	0.5	0.5	0.6	1.0	1.1	1.1	0.8
1957	1.0	1.0	0.9	0.8	0.8	0.6	0.5	0.6	0.7	0.6	0.9	1.1	0.8
1958	0.8	0.8	0.7	0.8	0.8	0.6	0.5	0.4	0.7	0.8	1.3	0.8	0.7
1959	0.7	0.8	0.7	0.6	0.8	0.5	0.4	0.5	0.7	0.7	1.0	0.3	0.7
1960	0.9	0.9	0.8	0.8	0.8	0.4	0.6	0.6	0.6	0.8	1.0	0.8	0.7
1961	0.7	0.9	1.1	0.7	0.6	0.5	0.4	0.4	0.7	0.7	0.9	0.9	0.7
1962	1.0	0.9	0.8	0.7	0.7	0.8	0.4	0.4	0.5	0.6	0.8	0.8	0.7
1963	0.9	0.9	1.0	0.7	0.6	0.5	0.5	0.5	0.6	0.9	0.9	1.0	0.7
1964	1.1	0.9	1.1	0.0	0.6	0.5	0.5	0.7	0.7	0.9	0.9	1.1	0.8
1965	1.1	1.3	1.0	0.8	0.7	0.6	0.6	0.6	0.7	1.1	1.2	1.1	0.9
1966	1.1	1.1	1.2	1.5	0.9	0.9	0.5	0.5	0.7	1.1	1.3	1.1	1.0
1967	1.1	1.3	1.1	0.9	0.8	0.6	0.6	0.7	0.6	1.1	1.0	1.1	1.0
1968	1.1	1.2	1.1	1.2	0.8	0.6	0.6	0.6	0.7	1.1	1.3	1.1	1.0
1969	1.1	1.1	1.1	0.9	0.8	0.6	0.6	0.6	0.7	1.1	1.1	1.1	1.0
1970	1.1	1.4	1.0	0.9	0.8	0.6	0.6	0.7	0.6	1.1	1.1	1.1	1.0
1971	0.0	0.0	0.0	0.0	0.5	0.4	0.4	0.4	0.6	0.0	0.0	0.0	0.7
1972	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
1973	0.0	1.0	1.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
1974	0.0	0.0	1.1	0.0	0.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8
1975	1.1	0.8	1.1	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.8
1976	1.1	0.8	1.1	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1982	1.1	0.0	1.1	0.0	0.7	0.0	0.4	0.4	0.7	0.0	0.0	1.1	0.8
1983	1.1	0.0	1.1	0.0	0.7	0.0	0.4	0.4	0.7	0.0	0.0	1.1	0.8
1984	0.0	0.0	0.0	0.0	0.6	0.0	0.4	0.4	0.6	0.0	1.1	1.1	0.8
1985	1.0	0.9	1.1	0.7	0.5	0.0	0.3	0.5	0.6	0.7	0.9	0.9	0.7
1986	1.1	0.7	1.1	0.0	0.5	0.5	0.4	0.5	0.6	0.6	0.9	0.9	0.7
1987	0.8	0.9	1.1	0.6	0.5	0.4	0.4	0.5	0.5	0.8	0.9	0.9	0.7
MEAN	1.0	1.0	1.0	0.8	0.6	0.5	0.5	0.5	0.7	0.9	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S40 (47.38N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.5	4.3	6.3	3.5	2.7	1.5	1.5	1.5	1.8	2.7	4.0	5.2	
1957	2.3	2.6	3.2	4.2	2.8	1.9	1.5	1.4	1.8	2.8	2.8	3.9	
1958	2.9	4.1	1.8	4.9	2.2	1.7	1.7	1.3	2.0	1.9	4.3	2.7	
1959	1.9	2.6	4.5	2.0	2.2	1.3	1.2	1.4	2.0	0.9	3.2	5.6	
1960	2.7	4.0	2.7	2.7	3.2	1.5	1.3	1.8	1.7	2.0	4.2	2.2	
1961	1.8	3.2	2.8	2.5	2.6	1.5	1.6	1.4	2.1	2.2	3.6	2.1	
1962	2.9	3.7	4.0	2.2	2.7	1.1	1.9	1.2	1.4	2.5	2.2	2.0	
1963	3.2	3.1	2.8	3.1	1.7	1.6	1.1	1.7	2.6	1.9	2.9	4.6	
1964	4.4	2.1	3.9	3.3	2.0	1.7	1.1	2.0	2.4	2.4	2.9	3.3	
1965	3.5	5.1	4.6	2.6	1.8	2.0	1.9	2.1	2.0	2.9	6.3	3.7	
1966	3.4	3.7	6.1	4.5	2.4	1.9	2.0	1.4	1.7	3.6	3.7	3.7	
1967	5.4	4.3	3.4	2.8	2.8	2.1	1.6	3.2	2.4	3.3	3.1	4.0	
1968	3.4	2.9	3.7	2.9	2.0	1.9	2.8	2.0	2.2	3.7	4.2	4.8	
1969	4.2	3.1	5.1	3.7	2.3	2.4	1.4	2.7	2.8	0.0	3.0	3.4	
1970	2.5	2.6	3.8	4.6	2.2	1.8	1.8	1.5	3.9	3.8	4.6	5.2	
1971	2.5	3.6	4.4	2.7	3.3	1.5	1.4	1.2	1.9	4.0	3.9	3.6	
1972	2.5	3.9	4.1	2.8	1.1	0.9	1.5	1.2	3.3	3.5	3.8	3.4	
1973	3.3	3.3	3.4	2.6	3.1	1.6	1.6	1.3	2.5	1.1	2.9	3.9	
1974	2.4	2.1	3.7	3.2	2.1	1.5	1.7	1.8	1.7	2.5	2.9	4.3	
1975	4.6	2.3	4.6	2.0	2.0	1.8	2.2	2.7	2.2	1.1	5.8	3.7	
1976	3.4	3.2	5.7	3.3	2.0	2.5	1.3	1.6	2.4	2.0	2.0	2.4	
1977	2.4	5.9	4.1	2.5	1.6	1.4	2.1	1.5	4.4	0.0	3.7	5.6	
1978	4.1	2.5	2.3	2.3	1.8	1.6	1.3	1.7	2.8	2.5	2.6	3.5	
1979	2.5	3.7	3.3	3.8	2.2	1.8	1.1	2.2	2.0	2.8	3.1	2.4	
1980	4.4	3.0	3.3	3.5	1.5	1.7	1.3	1.8	2.9	2.8	2.4	2.5	
1981	1.8	2.1	2.9	2.5	1.7	2.7	1.1	1.3	3.2	3.0	2.4	2.3	
1982	4.5	2.7	4.1	2.2	1.8	1.8	1.6	1.3	3.0	2.9	3.4	2.5	
1983	3.8	5.2	3.4	2.2	2.4	1.8	2.3	1.6	1.7	1.9	4.8	3.8	
1984	2.6	3.5	2.7	2.4	1.8	2.1	1.6	1.1	2.1	3.7	2.9	4.1	
1985	2.8	3.3	6.7	4.0	2.1	2.3	1.1	1.7	2.2	1.1	2.0	5.1	
1986	3.4	2.9	3.6	2.0	1.9	1.4	1.0	1.1	1.8	2.2	3.6	2.3	
1987	2.0	4.4	4.3	2.6	1.8	1.4	1.6	1.5	1.9	2.0	2.1	2.9	

32 YR. STATISTICS FOR WIS STATION S40

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	157.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	86.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030418

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	660	1013	583	120	18	3					2397
0.50-0.99		1206	331	348	181	80	6	1			2153
1.00-1.49			326	58	111	105	43	4			847
1.50-1.99			224	5	27	37	39	26	1		359
2.00-2.49			42	20	1	10	9	4	3		89
2.50-2.99				5			2	6			13
3.00-3.49				3							3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	660	2219	1706	559	338	235	99	41	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 5497.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	433	658	371	60	7						1529
0.50-0.99		623	346	240	75	17	1				1302
1.00-1.49			87	115	80	55	8	1			346
1.50-1.99			21	19	24	48	16	6			134
2.00-2.49			2	3	8	33	13	6			65
2.50-2.99						8	9	4			21
3.00-3.49						2	2	5	2		11
3.50-3.99								3			3
4.00-4.49									2		2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	433	1281	827	437	194	163	49	25	6	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3207.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	597	883	452	50	2						1984
0.50-0.99		730	788	334	47	2					1901
1.00-1.49			167	352	145	22	4				690
1.50-1.99			17	91	118	44	9	1			280
2.00-2.49				12	48	63	9	2			134
2.50-2.99					1	56	18	5			80
3.00-3.49						12	16	7			35
3.50-3.99						1	7	3	1		12
4.00-4.49								6			6
4.50-4.99								1	3		4
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	597	1613	1424	639	361	200	63	25	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4808.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	493	777	325	10	3	1					1609
0.50-0.99		552	930	177	7	2					1668
1.00-1.49			229	211	33	1					474
1.50-1.99			10	103	50	14					177
2.00-2.49				25	31	21	2				79
2.50-2.99				2	26	27	5	3			63
3.00-3.49						22	5				27
3.50-3.99						8	6	1			15
4.00-4.49						1	6				7
4.50-4.99								3			3
5.00-5.49								2	1		3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	493	1329	1494	528	150	97	24	9	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3871.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	637	1224	372	21	1	.	.	.	.	.	2255
0.50-0.99	.	712	1751	137	9	.	.	.	.	.	2609
1.00-1.49	.	.	594	390	39	.	.	.	.	.	1023
1.50-1.99	.	.	23	345	79	7	.	.	.	.	454
2.00-2.49	.	.	.	84	68	11	1	.	.	.	164
2.50-2.99	.	.	.	2	94	29	3	1	.	.	129
3.00-3.49	6	57	6	5	.	.	74
3.50-3.99	40	14	3	1	.	58
4.00-4.49	2	22	9	.	.	33
4.50-4.99	8	11	1	.	20
5.00-5.49	1	8	2	.	11
5.50-5.99	3	2	.	11
6.00-6.49	3	.	2
6.50-6.99	1	.	3
7.00+	1
TOTAL	637	1936	2740	979	296	146	55	40	18	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 6420.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	472	736	248	12	.	.	.	.	.	.	1468
0.50-0.99	.	412	1263	94	2	.	.	.	.	.	1771
1.00-1.49	.	.	387	374	54	4	.	.	.	.	819
1.50-1.99	.	.	23	241	99	14	.	.	.	.	377
2.00-2.49	.	.	.	65	58	28	1	.	.	.	152
2.50-2.99	66	18	3	.	.	.	88
3.00-3.49	2	38	1	.	.	.	46
3.50-3.99	23	16	.	.	.	32
4.00-4.49	4	18	.	.	.	24
4.50-4.99	5	.	.	.	4
5.00-5.49	1	1	2
5.50-5.99	2	.	2
6.00-6.49	3	.	3
6.50-6.99	0
7.00+	0
TOTAL	472	1148	1921	786	281	129	34	18	7	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4499.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	445	860	634	38	2	.	.	.	.	.	1979
0.50-0.99	.	498	1515	456	36	1	.	.	.	.	2506
1.00-1.49	.	.	316	393	128	5	.	.	.	.	842
1.50-1.99	.	.	20	182	99	23	.	.	.	.	324
2.00-2.49	.	.	.	51	48	25	.	.	.	.	124
2.50-2.99	42	13	1	.	.	.	56
3.00-3.49	2	36	1	.	.	.	39
3.50-3.99	13	4	1	.	.	18
4.00-4.49	3	.	1	.	4
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	445	1358	2485	1120	357	116	9	1	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 5522.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	571	1153	1007	216	2	.	.	.	.	.	2949
0.50-0.99	.	946	1744	853	102	1	.	.	.	.	3646
1.00-1.49	.	.	1068	234	146	19	.	.	.	.	1467
1.50-1.99	.	.	116	405	36	21	.	.	.	.	578
2.00-2.49	.	.	.	216	10	12	.	.	.	.	238
2.50-2.99	.	.	.	11	48	6	.	1	.	.	66
3.00-3.49	9	6	1	1	.	.	17
3.50-3.99	2	7	.	1	.	.	10
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	571	2099	3935	1935	355	72	3	3	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 8401.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	675	1133	236	34	1	.	.	.	.	.	2079
0.50-0.99	.	930	1355	108	19	.	.	.	.	.	2412
1.00-1.49	.	.	950	71	20	5	.	.	.	.	1046
1.50-1.99	.	.	98	377	8	4	.	.	.	.	482
2.00-2.49	.	.	.	310	6	3	.	.	.	.	319
2.50-2.99	.	.	.	17	80	3	.	.	.	.	97
3.00-3.49	22	2	.	.	.	.	25
3.50-3.99	1	.	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	675	2063	2639	917	152	17	0	0	0	0	6051.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6051.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	557	865	171	23	1	.	.	.	.	.	1617
0.50-0.99	.	687	898	72	11	1	.	.	.	.	1669
1.00-1.49	.	.	599	91	11	6	.	.	.	.	707
1.50-1.99	.	.	74	268	4	5	.	.	.	.	351
2.00-2.49	.	.	.	149	22	1	.	.	.	.	172
2.50-2.99	.	.	.	5	52	.	.	.	.	.	57
3.00-3.49	9	9	.	.	.	.	18
3.50-3.99	3	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	557	1552	1742	608	110	25	0	0	0	0	4307.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4307.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	662	989	201	32	4	.	.	.	.	.	1888
0.50-0.99	.	1020	1009	71	13	.	.	.	.	.	2113
1.00-1.49	.	.	786	132	20	3	.	.	.	.	941
1.50-1.99	.	.	77	362	3	6	.	.	.	.	448
2.00-2.49	.	.	.	145	51	1	.	.	.	.	197
2.50-2.99	.	.	.	1	89	.	.	.	.	.	90
3.00-3.49	8	20	.	.	.	.	28
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	.	.	.	.	1
4.50-4.99	1	.	.	.	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	662	2009	2073	743	188	34	1	0	0	0	5347.

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 5347.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	836	1577	193	32	4	.	.	.	.	.	2642
0.50-0.99	.	2010	355	70	12	.	.	.	.	.	2447
1.00-1.49	.	.	813	25	14	4	.	.	.	.	856
1.50-1.99	.	.	163	89	4	1	.	.	.	.	257
2.00-2.49	.	.	4	32	8	.	.	.	.	.	44
2.50-2.99	.	.	.	6	16	.	.	.	.	.	22
3.00-3.49	3	2	.	.	.	.	5
3.50-3.99	1	1	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	836	3587	1528	254	62	8	0	0	0	0	5877.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 5877.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1552	2034	464	87	8	.	.	.	.	.	4145
0.50-0.99	.	2839	293	130	26	7	.	.	.	.	3289
1.00-1.49	.	.	1026	24	44	.	.	.	.	.	1101
1.50-1.99	.	.	180	1	6	5	.	1	.	.	182
2.00-2.49	.	.	.	1	.	.	.	1	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1552	4873	1964	243	84	13	0	2	0	0	0
TOTAL	1552	4873	1964	243	84	13	0	2	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 8172.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1306	1781	465	89	21	3	.	.	.	.	3665
0.50-0.99	.	2558	721	136	26	10	1	.	.	.	3452
1.00-1.49	.	.	893	22	43	4	.	.	.	.	962
1.50-1.99	.	.	270	23	9	3	.	.	.	.	303
2.00-2.49	.	.	2	13	.	1	.	.	.	.	16
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1306	4339	2351	285	99	21	1	0	0	0	0
TOTAL	1306	4339	2351	285	99	21	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 7867.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1022	1388	573	90	13	1	.	.	.	.	3087
0.50-0.99	.	2547	1223	121	39	17	1	1	.	.	3949
1.00-1.49	.	.	912	23	27	7	2	.	.	.	971
1.50-1.99	.	.	427	40	7	5	.	1	.	.	480
2.00-2.49	.	.	.	32	.	.	.	.	.	.	32
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1022	3935	3135	309	86	30	3	2	0	0	0
TOTAL	1022	3935	3135	309	86	30	3	2	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7978.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	618	963	447	134	13	.	.	.	.	.	2175
0.50-0.99	.	1740	487	179	82	82	11	2	.	.	2583
1.00-1.49	.	.	781	29	32	42	13	3	.	.	900
1.50-1.99	.	.	326	25	9	12	2	1	.	.	376
2.00-2.49	.	.	4	19	.	2	.	1	1	.	27
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	618	2703	2045	387	136	138	26	7	2	0	0
TOTAL	618	2703	2045	387	136	138	26	7	2	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 5680.

STATION S41 47.23N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

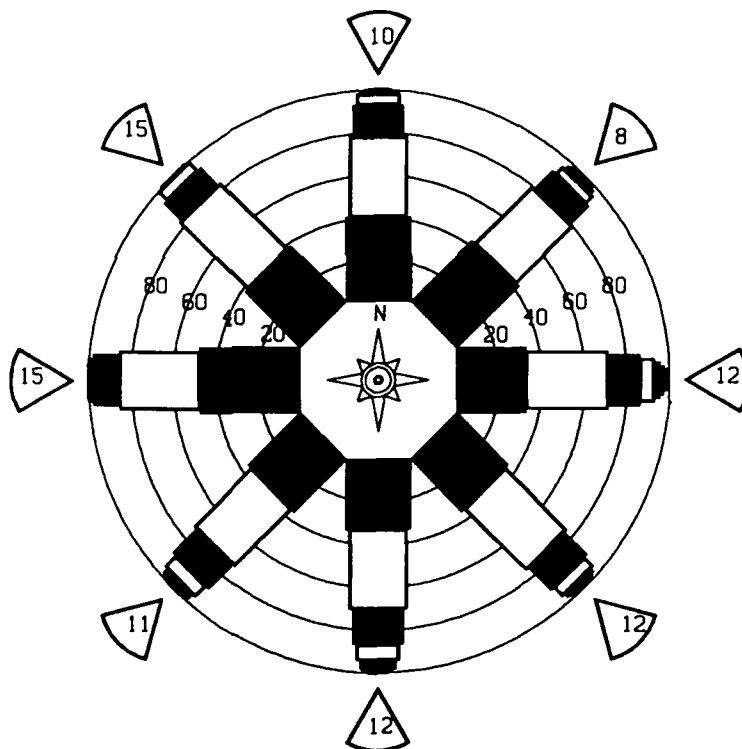
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER	
0.00-0.49	1154	1804	674	105	10						3747
0.50-0.99		2001	1501	353	69	21	2				3947
1.00-1.49			1014	255	95	29	7				1400
1.50-1.99			207	258	58	25	6	3			557
2.00-2.49			5	118	36	21	3	1			184
2.50-2.99				5	51	16	4	2			78
3.00-3.49					6	21	3	2			32
3.50-3.99						10	3	1			14
4.00-4.49							5	1			6
4.50-4.99							1	2			3
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1154	3805	3401	1094	325	143	34	13	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.

STATION 41
47.23N, 87.93 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S41 (47.23N 87.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	0.8	1.0	0.8	0.7	0.5	0.5	0.4	0.6	0.9	1.0	1.0	0.8
1957	0.9	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.6	0.6	0.8	0.9	0.7
1958	0.7	0.9	0.5	0.7	0.7	0.5	0.5	0.4	0.7	0.7	1.1	0.7	0.7
1959	0.7	0.7	0.6	0.6	0.7	0.4	0.4	0.5	0.6	0.7	0.9	1.2	0.7
1960	0.8	0.9	0.7	0.8	0.7	0.4	0.3	0.5	0.6	0.7	0.9	0.7	0.7
1961	0.6	0.8	1.1	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.7	0.8	0.7
1962	0.9	0.9	0.8	0.6	0.7	0.4	0.4	0.3	0.4	0.5	0.7	0.7	0.6
1963	0.8	0.8	0.9	0.6	0.5	0.5	0.4	0.4	0.5	0.6	0.8	0.9	0.6
1964	1.0	0.7	1.0	1.0	0.7	0.5	0.5	0.6	0.6	0.8	0.8	0.9	0.7
1965	1.2	1.1	0.9	0.7	0.6	0.6	0.5	0.5	0.7	1.0	1.1	1.3	0.8
1966	1.0	1.1	1.4	0.8	0.8	0.5	0.5	0.5	0.6	1.0	1.2	1.1	0.8
1967	1.2	1.1	1.0	0.8	0.7	0.6	0.6	0.6	0.7	1.0	0.9	1.3	0.9
1968	1.1	1.1	1.1	0.9	0.8	0.6	0.5	0.5	0.6	1.1	1.1	1.2	0.9
1969	1.3	0.8	1.0	0.8	0.7	0.6	0.4	0.6	0.7	1.0	0.9	1.0	0.8
1970	1.0	1.1	0.9	1.0	0.8	0.5	0.5	0.5	0.9	1.3	1.1	1.2	0.9
1971	0.8	0.9	0.8	0.6	0.5	0.3	0.4	0.4	0.6	0.9	0.9	0.7	0.7
1972	0.8	0.8	0.9	0.5	0.4	0.3	0.4	0.5	0.8	0.9	0.9	1.0	0.7
1973	0.9	1.0	1.0	0.8	0.7	0.5	0.5	0.4	0.6	0.7	0.9	0.9	0.8
1974	0.9	0.7	0.9	0.7	0.7	0.5	0.5	0.5	0.6	0.7	0.8	1.0	0.7
1975	1.1	0.7	1.1	0.6	0.4	0.5	0.4	0.5	0.6	1.0	1.1	1.0	0.8
1976	1.1	1.0	1.3	0.8	0.4	0.6	0.3	0.5	0.5	0.5	0.5	0.7	0.7
1977	0.9	1.1	1.2	0.5	0.5	0.4	0.4	0.4	0.7	0.7	0.9	1.0	0.7
1978	0.9	0.8	0.7	0.8	0.5	0.5	0.4	0.5	0.8	0.6	0.9	0.9	0.7
1979	0.8	0.7	0.9	0.7	0.6	0.5	0.4	0.5	0.6	0.6	0.9	0.9	0.7
1980	0.9	0.6	0.8	0.6	0.5	0.5	0.4	0.5	0.7	0.8	0.7	0.9	0.7
1981	0.7	0.8	0.7	0.7	0.5	0.5	0.3	0.4	0.6	0.8	0.7	0.7	0.6
1982	1.1	1.0	1.1	0.7	0.7	0.5	0.4	0.4	0.6	0.8	0.9	0.9	0.8
1983	0.9	0.8	1.2	0.7	0.6	0.5	0.4	0.4	0.6	0.7	1.1	1.0	0.7
1984	0.8	0.8	0.9	0.8	0.5	0.5	0.4	0.4	0.6	0.8	0.9	1.0	0.7
1985	0.8	0.7	1.2	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.8	0.8	0.7
1986	0.9	0.8	0.9	0.9	0.5	0.4	0.4	0.3	0.6	0.6	0.8	0.8	0.6
1987	0.7	0.8	1.1	0.6	0.5	0.3	0.4	0.4	0.5	0.7	0.8	0.7	0.6
MEAN	0.9	0.9	0.9	0.7	0.6	0.5	0.4	0.5	0.6	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S41 (47.23N 87.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.6	4.4	5.8	3.7	3.0	1.5	1.2	1.1	1.1	2.8	3.7	5.3	
1957	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1958	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1959	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1960	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1961	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1962	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1963	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1964	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1965	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1966	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1967	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1968	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1969	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1970	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1971	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1972	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1973	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1974	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1975	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1976	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1977	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1978	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1979	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1980	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1981	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1982	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1983	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1984	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1985	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1986	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1987	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	

32 YR. STATISTICS FOR WIS STATION S41

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	157.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	88.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030418

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	563	993	559	128	20	4	.	.	.	.	2267
0.50-0.99	.	1135	348	347	190	73	13	.	.	.	2106
1.00-1.49	.	.	501	65	135	139	51	10	.	.	901
1.50-1.99	.	.	255	7	23	65	55	33	1	.	439
2.00-2.49	.	.	44	27	4	14	13	12	6	.	120
2.50-2.99	.	.	.	12	.	1	5	9	2	.	29
3.00-3.49	.	.	.	6	.	.	.	1	.	.	9
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	563	2128	1707	592	372	296	137	65	11	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5508.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	387	705	308	45	3	.	.	.	.	.	1448
0.50-0.99	.	541	413	216	68	10	1	.	.	.	1249
1.00-1.49	.	.	161	72	68	35	4	1	.	.	341
1.50-1.99	.	.	35	31	44	48	18	5	1	.	182
2.00-2.49	.	.	1	16	19	16	11	6	.	.	69
2.50-2.99	.	.	.	5	1	18	10	4	.	.	38
3.00-3.49	.	.	.	1	1	6	3	3	.	.	12
3.50-3.99	1	.	2	.	3	.	9
4.00-4.49	1	.	.	1
4.50-4.99	1	3	.	4
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	387	1246	918	386	205	128	52	24	8	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 3149.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	590	886	468	77	3	.	.	.	.	.	2024
0.50-0.99	.	608	988	342	52	6	1	.	.	.	1997
1.00-1.49	.	.	401	196	138	29	4	.	.	.	769
1.50-1.99	.	.	41	124	120	60	7	3	.	.	355
2.00-2.49	.	.	.	40	62	50	13	1	.	.	166
2.50-2.99	.	.	.	5	10	57	24	2	.	.	98
3.00-3.49	1	20	24	2	.	.	47
3.50-3.99	1	13	4	.	.	18
4.00-4.49	2	7	1	.	10
4.50-4.99	3	3	.	6
5.00-5.49	2	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	590	1494	1898	784	387	223	88	22	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5151.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	510	840	331	31	2	.	.	.	.	.	1714
0.50-0.99	.	494	1090	201	20	3	.	.	.	.	1808
1.00-1.49	.	.	367	204	44	4	.	.	.	.	619
1.50-1.99	.	.	28	149	77	16	.	.	.	.	270
2.00-2.49	.	.	.	50	48	24	7	1	.	.	130
2.50-2.99	40	24	5	3	.	.	72
3.00-3.49	3	38	8	6	.	.	55
3.50-3.99	14	7	2	.	.	23
4.00-4.49	1	9	1	.	.	11
4.50-4.99	3	.	.	3
5.00-5.49	2	.	.	2
5.50-5.99	3	.	3
6.00-6.49	3	.	3
6.50-6.99	0
7.00+	0
TOTAL	510	1334	1816	635	234	124	36	18	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4421.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	660	1280	434	32	1	.	.	.	.	.	2407
0.50-0.99	.	839	1974	208	22	.	.	.	.	.	3043
1.00-1.49	.	.	770	514	55	7	.	.	.	.	1346
1.50-1.99	.	.	41	470	91	12	.	.	.	.	614
2.00-2.49	.	.	.	146	103	19	2	.	.	.	270
2.50-2.99	.	.	.	2	145	19	1	1	.	.	168
3.00-3.49	12	83	4	3	1	.	103
3.50-3.99	48	13	.	.	.	61
4.00-4.49	7	32	6	.	.	45
4.50-4.99	14	12	1	1	28
5.00-5.49	9	.	.	9
5.50-5.99	2	2	.	4
6.00-6.49	1	8	.	9
6.50-6.99	1	.	1
7.00+	3	1	4
TOTAL	660	2119	3219	1372	429	195	66	34	16	2	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 7602.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	435	781	304	26	2	.	.	.	.	.	1548
0.50-0.99	.	435	1040	133	9	2	.	.	.	.	1619
1.00-1.49	.	.	423	212	40	11	.	.	.	.	686
1.50-1.99	.	.	42	168	38	22	1	.	.	.	271
2.00-2.49	.	.	.	70	26	14	1	2	.	.	113
2.50-2.99	.	.	.	5	43	18	2	1	.	.	69
3.00-3.49	5	18	2	5	.	.	30
3.50-3.99	6	1	1	.	.	8
4.00-4.49	3	9	1	.	.	13
4.50-4.99	2	5	.	.	7
5.00-5.49	2	1	.	3
5.50-5.99	1	.	.	1
6.00-6.49	1	.	1
6.50-6.99	3	1	4
7.00+	0
TOTAL	435	1216	1809	614	163	94	18	18	5	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 4106.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	545	1012	641	317	12	.	.	.	.	.	2527
0.50-0.99	.	971	933	445	117	1	.	.	.	.	2477
1.00-1.49	.	.	585	97	56	25	.	.	.	.	763
1.50-1.99	.	.	67	137	19	20	1	.	.	.	244
2.00-2.49	.	.	.	50	20	13	.	.	.	.	83
2.50-2.99	.	.	.	4	4	23	.	.	.	.	31
3.00-3.49	1	5	.	.	.	.	7
3.50-3.99	1	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	545	1983	2226	1050	229	97	2	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 5747.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	911	1317	456	231	5	.	.	.	.	.	2920
0.50-0.99	.	1894	478	194	54	4	.	.	.	.	2624
1.00-1.49	.	.	506	32	41	16	.	.	.	.	595
1.50-1.99	.	.	124	45	13	5	.	.	.	.	187
2.00-2.49	.	.	7	10	5	7	.	1	.	.	30
2.50-2.99	.	.	.	3	1	3	.	.	.	.	7
3.00-3.49	2	2	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	911	3211	1571	515	119	37	2	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 5963.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	888	1170	408	86	7	.	.	.	.	.	2559
0.50-0.99	.	1083	403	140	50	7	.	.	.	.	1683
1.00-1.49	.	.	422	19	44	23	1	.	.	.	509
1.50-1.99	.	.	125	3	7	13	1	.	.	.	149
2.00-2.49	.	.	13	6	.	5	.	.	.	.	24
2.50-2.99	1	.	.	.	1
3.00-3.49	1	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	888	2253	1371	254	108	48	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 4615.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	598	744	240	57	3	1	.	.	.	.	1643
0.50-0.99	.	762	659	67	37	4	1	.	.	.	1530
1.00-1.49	.	.	657	12	31	11	.	.	.	.	711
1.50-1.99	.	.	100	104	1	6	.	.	.	.	211
2.00-2.49	.	.	3	84	.	.	1	.	.	.	88
2.50-2.99	.	.	.	10	14	.	.	1	.	.	25
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	598	1506	1659	334	89	22	2	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3949.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	666	706	268	54	7	.	.	.	.	.	1701
0.50-0.99	.	907	745	70	25	2	.	.	.	.	1749
1.00-1.49	.	.	867	8	12	7	.	.	.	.	894
1.50-1.99	.	.	60	222	.	2	.	.	.	.	284
2.00-2.49	.	.	.	130	.	1	.	.	.	.	131
2.50-2.99	.	.	.	12	13	.	.	.	.	.	25
3.00-3.49	5	1	.	.	.	.	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	666	1613	1940	496	62	13	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4490.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	899	1248	252	69	12	1	.	.	.	.	2481
0.50-0.99	.	1914	413	81	21	2	.	.	.	.	2431
1.00-1.49	.	.	768	19	11	8	1	.	.	.	807
1.50-1.99	.	.	98	88	1	5	.	.	.	.	192
2.00-2.49	.	.	5	28	.	.	.	.	1	.	34
2.50-2.99	.	.	.	8	3	.	.	.	.	.	11
3.00-3.49	0
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	899	3162	1536	293	48	17	1	0	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 5580.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1784	2400	561	124	31	8	.	.	.	.	4908
0.50-0.99	.	3646	278	130	40	7	1	.	.	.	4102
1.00-1.49	.	.	1328	14	35	9	.	.	.	.	1386
1.50-1.99	.	.	233	.	4	2	.	.	.	.	239
2.00-2.49	.	.	1	4	.	1	.	1	.	.	7
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1784	6046	2401	274	110	27	1	1	0	0	9961

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 9961.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1406	2225	475	129	25	5	.	.	.	.	4265
0.50-0.99	.	3358	702	114	51	18	3	1	.	.	4247
1.00-1.49	.	.	1303	16	26	11	2	.	.	.	1358
1.50-1.99	.	.	289	17	3	3	.	.	.	.	312
2.00-2.49	.	.	5	16	.	.	.	.	.	.	21
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1406	5583	2774	293	105	37	5	1	0	0	9550

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 9550.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	943	1417	580	131	18	6	.	.	.	.	3095
0.50-0.99	.	2677	1256	156	73	39	6	2	.	.	4209
1.00-1.49	.	.	1066	18	26	21	9	3	.	.	1143
1.50-1.99	.	.	491	45	3	11	.	1	1	.	552
2.00-2.49	.	.	.	38	1	.	.	.	.	.	39
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	943	4094	3393	392	121	77	15	6	1	0	8466

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 8466.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	513	844	399	122	18	4	.	.	.	.	1900
0.50-0.99	.	1620	456	202	106	74	13	1	.	.	2472
1.00-1.49	.	.	642	16	48	70	26	7	.	.	809
1.50-1.99	.	.	315	22	7	24	2	9	1	.	380
2.00-2.49	.	.	7	20	.	.	1	4	1	.	33
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	513	2464	1819	384	179	172	42	21	2	0	5246

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 5246.

STATION S42 47.08N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1230	1857	669	166	17	3					3942
0.50-0.99		2289	1218	305	94	26					3936
1.00-1.49			1077	152	82	43	10	2			1366
1.50-1.99			235	164	45	32	8				489
2.00-2.49			8	74	29	16	5				134
2.50-2.99				7	27	16	5				57
3.00-3.49					3	17	5				27
3.50-3.99						7	3				11
4.00-4.49						1	5				7
4.50-4.99							1				3
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49									1		1
6.50-6.99											0
7.00-7.49											0
7.50-7.99											0
8.00-8.49											0
8.50-8.99											0
9.00-9.49											0
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MEAN HS(METERS) BY MONTH AND YEAR													
WIS STATION S42 (47.08N 88.13W)													
MONTH													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.7												0.7
1957	0.9	0.8	1.0	0.9	0.7	0.6	0.5	0.4	0.6	0.9	1.0	1.0	0.7
1958	0.7	0.8	0.8	0.7	0.6	0.5	0.5	0.4	0.6	0.7	0.8	0.8	0.6
1959	0.6	0.7	0.8	0.6	0.7	0.4	0.3	0.4	0.6	0.7	0.8	1.1	0.7
1960	0.8	0.9	0.8	0.8	0.8	0.8	0.4	0.5	0.6	0.7	0.9	0.7	0.7
1961	0.8	0.8	1.1	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.7	0.7	0.7
1962	0.9	0.9	0.8	0.7	0.6	0.4	0.4	0.3	0.6	0.5	0.6	0.7	0.5
1963	0.8	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.7	0.7	0.6
1964	0.9	0.7	1.0	0.9	0.6	0.6	0.5	0.6	0.6	0.7	0.8	0.9	0.7
1965	1.1	1.1	1.0	0.7	0.6	0.6	0.5	0.5	0.6	1.1	1.1	1.1	0.8
1966	0.9	1.0	1.1	0.8	0.8	0.8	0.6	0.6	0.6	1.1	1.1	1.1	0.8
1967	1.1	1.1	1.1	0.8	0.7	0.7	0.5	0.6	0.6	0.8	1.1	1.1	0.8
1968	1.1	1.1	1.1	0.8	0.7	0.7	0.5	0.6	0.6	0.8	1.1	1.1	0.8
1969	1.1	1.1	1.1	0.8	0.7	0.7	0.5	0.6	0.6	0.8	1.1	1.1	0.8
1970	1.1	1.1	1.1	0.8	0.7	0.7	0.5	0.6	0.6	0.8	1.1	1.1	0.8
1971	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.3	0.5	0.7	0.8	1.0	0.7
1972	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.3	0.5	0.7	0.8	1.0	0.7
1973	0.8	0.9	1.0	0.7	0.7	0.7	0.4	0.4	0.6	0.7	0.8	1.0	0.7
1974	0.8	0.9	1.0	0.7	0.7	0.7	0.4	0.4	0.6	0.7	0.8	1.0	0.7
1975	1.0	1.0	1.1	0.7	0.4	0.5	0.5	0.5	0.6	1.0	1.0	1.0	0.7
1976	1.1	1.1	1.1	0.7	0.4	0.5	0.5	0.5	0.6	1.1	1.1	1.1	0.7
1977	1.1	1.1	1.1	0.7	0.4	0.5	0.5	0.5	0.6	1.1	1.1	1.1	0.7
1978	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.4	0.5	0.8	0.8	0.9	0.7
1979	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.4	0.5	0.8	0.8	0.9	0.7
1980	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.4	0.5	0.8	0.8	0.9	0.7
1981	0.7	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.6	0.7	0.7	0.7	0.6
1982	1.1	1.1	1.1	0.7	0.7	0.5	0.4	0.4	0.6	0.7	0.8	0.8	0.7
1983	0.8	0.8	1.2	0.7	0.7	0.5	0.4	0.4	0.6	1.1	1.1	0.9	0.7
1984	0.7	0.8	0.9	0.6	0.5	0.4	0.4	0.4	0.5	0.7	0.8	0.9	0.7
1985	0.8	0.8	1.0	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.8	0.8	0.6
1986	0.8	0.7	0.9	0.5	0.5	0.4	0.4	0.3	0.6	0.6	0.7	0.7	0.6
1987	0.7	0.8	1.1	0.6	0.5	0.3	0.4	0.4	0.4	0.6	0.8	0.7	0.6
MEAN	0.9	0.8	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.8	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR												
WIS STATION S42 (47.08N 88.13W)												
MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	4.7	6.9	4.1	3.3	1.5	1.3	1.5	1.8	2.6	3.9	5.4
1957	2.0	2.8	3.7	4.7	3.4	1.2	1.3	1.6	1.7	2.5	2.5	3.5
1958	2.4	3.9	2.2	4.9	1.8	1.5	1.8	1.2	1.6	1.6	4.5	2.5
1959	1.6	2.4	3.9	2.3	2.1	1.2	1.1	1.7	1.7	1.8	3.0	6.3
1960	2.2	3.3	2.9	3.0	2.7	1.1	0.9	1.4	1.8	2.1	4.6	1.8
1961	2.1	2.7	3.2	3.1	2.7	1.7	1.6	1.5	1.7	2.2	2.8	1.9
1962	3.4	3.3	4.4	1.8	2.3	1.2	1.4	1.0	1.0	1.8	2.0	1.8
1963	3.0	3.4	2.9	2.1	1.6	1.6	1.0	1.8	2.3	1.4	2.7	4.6
1964	5.4	1.6	3.3	2.9	1.7	1.3	1.2	2.4	1.6	1.7	3.1	2.9
1965	3.2	4.5	4.1	2.2	1.3	1.6	1.9	2.0	2.0	2.8	6.7	3.5
1966	2.6	2.8	5.7	4.5	2.1	1.6	1.9	1.5	1.6	3.2	3.4	2.8
1967	6.0	3.6	2.8	2.7	2.5	1.7	1.4	3.0	2.1	2.2	2.3	3.1
1968	2.7	2.6	2.5	2.7	1.9	1.6	2.6	2.0	1.8	2.9	3.4	4.4
1969	3.4	2.9	3.9	3.3	1.7	2.3	1.4	2.4	2.1	2.8	2.2	3.3
1970	2.3	2.3	3.7	4.4	1.6	1.9	1.8	1.4	3.3	3.0	4.1	4.9
1971	2.1	3.9	3.8	2.0	3.5	1.5	1.1	1.1	1.7	3.7	3.4	3.4
1972	2.4	4.1	3.1	2.8	1.2	0.9	1.3	1.2	2.6	3.0	3.8	3.0
1973	3.5	3.1	3.9	2.2	2.8	1.7	1.3	1.0	1.7	2.3	3.2	3.2
1974	2.1	1.8	4.1	3.6	2.2	1.8	1.6	1.4	1.6	1.9	2.9	4.2
1975	4.8	2.1	5.7	2.6	1.5	1.4	1.7	2.0	2.0	2.8	5.4	2.6
1976	2.7	3.1	4.9	2.9	2.0	1.9	1.0	1.6	2.2	1.5	1.6	2.2
1977	1.9	7.0	4.9	2.1	1.8	1.4	1.9	1.1	5.1	3.4	2.8	6.6
1978	3.4	2.4	2.4	2.9	2.2	1.4	1.7	1.5	3.2	2.1	2.3	3.6
1979	2.6	4.0	3.1	4.8	2.5	1.7	1.1	1.2	1.7	2.5	2.0	2.5
1980	2.6	3.4	4.1	2.6	2.0	2.1	1.2	1.6	2.7	2.2	2.6	2.6
1981	1.7	2.4	3.3	3.1	1.6	2.0	1.2	1.5	2.6	2.7	2.1	1.9
1982	5.0	2.8	3.4	3.1	2.5	1.7	1.3	1.4	2.5	3.5	2.7	2.4
1983	3.1	4.1	3.7	2.7	2.1	1.4	2.3	1.5	1.3	1.9	4.9	4.0
1984	2.5	2.9	2.8	2.7	1.5	1.9	1.3	0.9	1.3	4.1	2.1	4.3
1985	3.0	3.0	7.5	3.4	2.0	2.3	0.9	1.3	1.4	1.7	2.4	3.9
1986	3.0	3.3	4.3	3.4	2.1	1.2	1.2	1.0	2.2	2.5	2.5	2.5
1987	1.8	4.7	4.9	2.5	2.4	1.0	1.6	1.3	1.7	2.0	2.2	2.3

32 YR. STATISTICS FOR WIS STATION S42

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	82.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	85030418

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1441	1435	9	4	.	.	.	.	.	.	2885
0.50-0.99	.	1681	144	10	.	.	.	.	.	.	1829
1.00-1.49	.	.	760	1	.	.	.	.	.	.	770
1.50-1.99	.	.	227	48	.	.	.	.	.	.	228
2.00-2.49	.	.	9	3	.	.	.	.	.	.	57
2.50-2.99	.	.	.	8	.	3	.	.	.	.	11
3.00-3.49	.	.	.	3	.	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1441	3116	1149	74	0	3	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 5413.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	956	899	4	4	.	.	.	.	.	.	1859
0.50-0.99	.	861	326	4	.	.	.	.	.	.	1191
1.00-1.49	.	.	254	62	.	.	.	.	.	.	316
1.50-1.99	.	.	22	69	19	.	.	.	.	.	110
2.00-2.49	.	.	.	10	9	3	.	.	.	.	22
2.50-2.99	3	1	.	.	.	.	4
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	956	1760	606	145	31	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3281.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1657	1080	4	4	.	.	.	.	.	.	2741
0.50-0.99	.	849	903	1	.	.	.	.	.	.	1753
1.00-1.49	.	.	546	97	.	.	.	.	.	.	643
1.50-1.99	.	.	31	239	2	.	.	.	.	.	272
2.00-2.49	.	.	.	93	70	.	.	.	.	.	163
2.50-2.99	.	.	.	2	62	17	.	.	.	.	64
3.00-3.49	1	7	.	.	.	.	18
3.50-3.99	3	.	.	.	.	7
4.00-4.49	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1657	1929	1484	432	135	27	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 5301.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1551	1233	4	4	.	.	.	.	.	.	2788
0.50-0.99	.	1341	328	1	.	.	.	.	.	.	1670
1.00-1.49	.	.	363	24	.	.	.	.	.	.	387
1.50-1.99	.	.	45	41	.	.	.	.	.	.	86
2.00-2.49	.	.	1	13	8	.	.	.	.	.	22
2.50-2.99	.	.	.	1	6	1	.	.	.	.	8
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1551	2574	741	80	14	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 4645.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	2294	1898	1	.	.	.	.	.	.	.	4193
0.50-0.99	.	2556	182	1	.	.	.	.	.	.	2739
1.00-1.49	.	.	638	5	.	.	.	.	.	.	643
1.50-1.99	.	.	114	1	.	.	.	.	.	.	115
2.00-2.49	.	.	6	7	.	.	.	.	.	.	13
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2294	4454	941	16	1	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 7209.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1357	958	.	.	.	.	.	.	.	.	2315
0.50-0.99	.	1307	167	.	.	.	.	.	.	.	1474
1.00-1.49	.	.	290	.	.	.	.	.	.	.	290
1.50-1.99	.	.	54	5	.	.	.	.	.	.	59
2.00-2.49	.	.	1	2	.	.	.	.	.	.	3
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1357	2265	512	8	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 2.8 NO. OF CASES= 3877.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1299	799	.	.	.	.	.	.	.	.	2098
0.50-0.99	.	1070	166	.	.	.	.	.	.	.	1236
1.00-1.49	.	.	142	.	.	.	.	.	.	.	142
1.50-1.99	.	.	36	1	.	.	.	.	.	.	37
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1299	1869	344	2	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.7 NO. OF CASES= 3289.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1204	1026	.	.	.	.	.	.	.	.	2230
0.50-0.99	.	1321	170	.	.	.	.	.	.	.	1491
1.00-1.49	.	.	243	.	.	.	.	.	.	.	243
1.50-1.99	.	.	55	7	.	.	.	.	.	.	62
2.00-2.49	.	.	.	3	.	.	.	.	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1204	2347	468	10	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 3771.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =180.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1845	1680									3525
0.50-0.99		1996	116								2112
1.00-1.49			648								648
1.50-1.99			116								116
2.00-2.49			9	9							18
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1845	3676	889	9	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 6006.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =202.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1226	1195									2421
0.50-0.99		1809	385								2194
1.00-1.49			470								470
1.50-1.99			190	34							224
2.00-2.49				22							22
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1226	3004	1045	56	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 4988.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =225.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1219	945									2164
0.50-0.99		1760	570								2330
1.00-1.49			421								421
1.50-1.99			163	18							181
2.00-2.49				12							12
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1219	2705	1154	32	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 4781.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =247.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1512	1456									2968
0.50-0.99		2417	437								2854
1.00-1.49			819								819
1.50-1.99			143	16							159
2.00-2.49			2	10							12
2.50-2.99				3							3
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1512	3873	1401	29	1	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 6376.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2839	2766	255	.	.	.	.	.	.	.	5605
0.50-0.99	.	4304	1458	.	.	.	.	.	.	.	4559
1.00-1.49	.	.	233	.	.	.	.	.	.	.	1458
1.50-1.99	.	.	1	4	.	.	.	.	.	.	233
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2839	7070	1947	6	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 11095.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	2066	2533	550	.	.	.	.	.	.	.	4599
0.50-0.99	.	3611	1450	.	.	.	.	.	.	.	4161
1.00-1.49	.	.	239	13	.	.	.	.	.	.	1450
1.50-1.99	.	.	5	12	.	.	.	.	.	.	252
2.00-2.49	.	.	.	1	.	.	.	.	.	.	17
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2066	6144	2244	26	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 9804.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1777	1470	1336	.	.	.	.	.	.	.	3247
0.50-0.99	.	2834	1027	.	.	.	.	.	.	.	4170
1.00-1.49	.	.	491	51	.	.	.	.	.	.	1027
1.50-1.99	.	.	.	36	.	.	.	.	.	.	542
2.00-2.49	.	.	.	4	.	.	.	.	.	.	36
2.50-2.99	1	.	.	.	.	.	4
3.00-3.49	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1777	4304	2854	91	1	0	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 8445.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

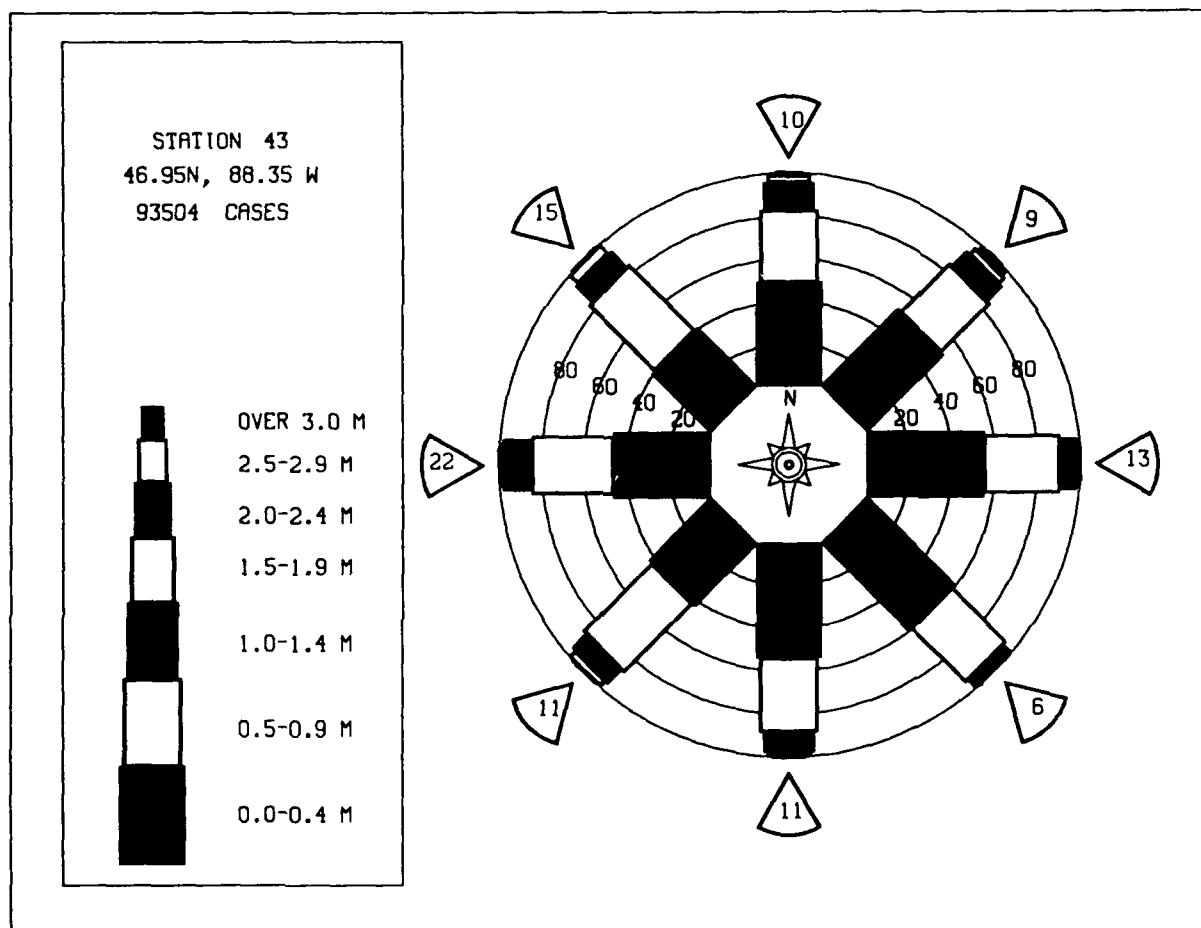
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1171	1071	4	.	.	.	.	.	.	.	2246
0.50-0.99	.	1861	371	.	.	.	.	.	.	.	2232
1.00-1.49	.	.	762	.	.	.	.	.	.	.	762
1.50-1.99	.	.	294	24	.	.	.	.	.	.	318
2.00-2.49	.	.	1	22	.	.	.	.	.	.	23
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1171	2932	1432	47	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 5223.

STATION S43 46.95N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	2542	2245	2	1	.	.	.	.	.	.	4789
0.50-0.99	.	3158	641	19	.	.	.	.	.	.	3800
1.00-1.49	.	.	1029	52	.	.	.	.	.	.	1048
1.50-1.99	.	.	246	31	2	.	.	.	.	.	300
2.00-2.49	.	.	3	2	7	.	.	.	.	.	42
2.50-2.99	1	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	2542	5403	1921	105	17	1	0	0	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S43 (46.95N 88.35W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.6	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.6
1957	0.5	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.7	0.7	0.6
1958	0.5	0.8	0.3	0.3	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.6	0.6
1959	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.4	0.5	0.5	0.8	0.8	0.6
1960	0.7	0.7	0.6	0.6	0.6	0.4	0.3	0.4	0.5	0.6	0.7	0.7	0.6
1961	0.6	0.6	0.8	0.6	0.5	0.5	0.3	0.3	0.5	0.6	0.6	0.7	0.6
1962	0.8	0.6	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6
1963	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.6
1964	0.7	0.5	0.8	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.7	0.6	0.6
1965	0.9	0.9	0.8	0.6	0.5	0.5	0.5	0.4	0.5	0.8	0.9	1.0	0.7
1966	0.8	0.9	1.0	0.6	0.7	0.4	0.5	0.4	0.5	0.8	1.0	0.9	0.7
1967	0.8	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.6	0.8	0.7	1.1	0.7
1968	1.0	0.8	1.1	0.9	0.7	0.5	0.5	0.5	0.6	0.8	0.9	0.9	0.7
1969	0.9	0.7	0.9	0.7	0.6	0.4	0.4	0.5	0.6	0.8	0.9	0.8	0.7
1970	1.0	0.9	1.0	0.8	0.7	0.4	0.5	0.5	0.7	0.8	0.9	0.8	0.7
1971	0.6	0.6	0.6	0.5	0.4	0.2	0.3	0.3	0.3	0.5	0.6	0.6	0.5
1972	0.7	0.7	0.7	0.6	0.6	0.3	0.4	0.4	0.4	0.7	0.7	0.7	0.6
1973	0.7	0.7	0.7	0.6	0.6	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1974	0.7	0.5	0.7	0.5	0.5	0.5	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1975	0.7	0.7	0.8	0.5	0.3	0.3	0.4	0.4	0.5	0.7	0.9	0.8	0.6
1976	0.7	0.7	0.9	0.7	0.7	0.5	0.2	0.4	0.5	0.6	0.3	0.6	0.6
1977	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.6
1978	0.8	0.8	0.6	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.6
1979	0.7	0.9	0.7	0.3	0.4	0.4	0.3	0.4	0.5	0.6	0.6	0.6	0.6
1980	0.7	0.6	0.6	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6
1981	0.7	0.7	0.6	0.3	0.4	0.4	0.3	0.3	0.4	0.5	0.6	0.6	0.6
1982	0.9	0.8	0.6	0.3	0.4	0.4	0.3	0.3	0.4	0.5	0.6	0.6	0.6
1983	0.7	0.6	0.7	0.3	0.5	0.4	0.4	0.3	0.4	0.5	0.7	0.6	0.6
1984	0.6	0.6	0.7	0.3	0.5	0.4	0.4	0.3	0.4	0.5	0.7	0.6	0.6
1985	0.7	0.7	0.6	0.3	0.5	0.4	0.4	0.3	0.4	0.5	0.6	0.6	0.6
1986	0.7	0.5	0.6	0.3	0.4	0.4	0.3	0.3	0.4	0.5	0.6	0.6	0.6
1987	0.6	0.6	0.7	0.4	0.4	0.3	0.3	0.3	0.4	0.6	0.6	0.6	0.5
MEAN	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S43 (46.95N 88.35W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.6	2.5	1.8	1.5	1.2	1.4	1.2	1.5	1.7	2.4	2.1	
1957	1.6	1.8	2.1	1.7	1.9	1.2	1.4	1.2	1.6	1.9	2.5	2.1	
1958	1.8	2.1	1.3	1.5	1.5	1.3	1.2	1.2	1.4	1.6	2.2	1.9	
1959	1.4	2.0	3.3	3.3	1.5	1.1	1.1	1.2	1.3	1.6	2.5	2.0	
1960	1.1	1.8	2.2	1.1	1.4	1.0	1.0	1.1	1.3	1.7	1.1	1.4	
1961	1.1	1.8	2.3	2.0	1.8	1.3	1.1	1.5	1.5	1.5	2.0	1.5	
1962	1.1	2.1	2.1	1.1	1.4	1.0	1.1	1.5	1.1	1.8	2.0	1.6	
1963	2.5	2.1	2.1	2.2	2.2	1.4	0.9	0.9	1.1	1.4	2.0	2.3	
1964	2.0	1.8	2.3	1.8	1.4	1.3	1.0	1.4	1.1	1.7	2.2	2.2	
1965	2.6	3.1	2.3	1.8	1.1	1.2	1.4	1.7	1.5	2.2	2.6	2.4	
1966	2.1	1.9	2.3	1.8	2.2	1.5	2.0	1.2	1.1	2.4	3.0	2.5	
1967	3.3	2.9	2.3	2.4	2.0	1.3	1.4	2.8	1.5	1.9	2.2	2.4	
1968	2.4	2.5	2.3	2.4	2.8	1.5	2.0	1.5	1.3	1.9	2.5	2.7	
1969	2.4	2.6	3.3	3.3	1.8	1.8	1.8	1.8	1.8	2.3	1.8	2.5	
1970	2.1	1.8	2.3	1.1	1.5	1.4	1.6	1.4	1.9	2.0	3.1	4.0	
1971	2.2	1.9	2.3	1.8	1.5	1.2	1.1	0.9	1.1	2.2	2.2	1.7	
1972	2.2	2.0	2.5	2.5	2.0	0.9	0.8	1.2	1.1	3.1	1.9	2.7	
1973	2.2	2.0	1.7	1.5	2.7	1.1	1.3	0.9	1.1	1.5	2.5	2.5	
1974	1.7	1.6	1.7	2.4	2.2	1.4	1.4	1.4	1.3	1.6	1.7	1.7	
1975	2.2	1.9	3.2	1.3	1.2	1.4	1.5	1.7	1.5	2.2	4.0	1.8	
1976	2.0	2.4	3.6	2.5	1.5	1.4	0.7	1.2	1.6	1.3	1.5	2.2	
1977	1.9	2.6	2.1	1.5	1.0	0.9	1.4	1.1	2.7	1.9	2.1	2.0	
1978	2.3	2.5	1.6	1.4	1.2	1.2	1.2	1.2	2.0	1.5	1.7	1.6	
1979	1.7	1.8	2.0	1.6	1.2	1.2	1.1	1.2	1.3	2.1	1.5	1.5	
1980	2.6	2.4	1.8	2.0	1.2	1.2	0.8	1.2	2.0	1.8	2.1	2.1	
1981	1.6	1.5	2.1	1.6	1.2	1.6	0.9	0.9	2.0	1.7	1.9	1.4	
1982	2.2	1.8	2.3	1.9	1.4	1.3	1.2	1.0	1.9	1.8	1.9	1.7	
1983	2.3	3.0	2.3	1.4	2.1	1.5	1.7	1.0	1.3	3.3	2.3	2.3	
1984	1.9	1.9	2.1	1.8	1.5	1.4	1.3	0.7	1.0	1.5	1.9	3.1	
1985	1.9	2.2	2.7	1.7	1.5	1.8	0.7	1.2	1.4	1.4	2.0	2.1	
1986	2.0	1.7	1.7	1.7	2.1	1.2	0.9	0.7	1.3	1.9	1.8	1.4	
1987	1.5	2.1	2.9	1.3	1.4	1.0	0.7	1.2	1.2	1.8	2.2	1.9	

32 YR. STATISTICS FOR WIS STATION S43

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.8
LARGEST WAVE HS	(METERS)	4.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	7.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	42.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		66032321

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	281	744	325	34	5						1389
0.50-0.99	.	588	1269	365	48	14	.	.	.	.	2284
1.00-1.49	.	.	857	119	174	35	1	.	.	.	1186
1.50-1.99	.	.	233	301	89	96	16	.	.	.	735
2.00-2.49	.	.	.	451	10	111	45	.	.	.	621
2.50-2.99	.	.	.	170	65	34	71	16	.	.	356
3.00-3.49	.	.	.	3	78	5	22	39	.	.	147
3.50-3.99	32	8	4	19	11	.	74
4.00-4.49	5	18	.	4	7	.	34
4.50-4.99	7	.	.	3	.	10
5.00-5.49	3	.	.	.	.	4
5.50-5.99	3	.	.	1	.	2
6.00-6.49	2	.	.	.	0
6.50-6.99	0
7.00+	0
TOTAL	281	1332	2684	1443	506	334	161	82	22	0	
MEAN HS(M) = 1.2	LARGEST HS(M)=		6.4	MEAN TP(SEC)=		4.7	NO. OF CASES=		6417.		

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	224	511	245	22	3	.	.	.	.	.	1005
0.50-0.99	.	413	1044	281	28	.	.	.	.	.	1766
1.00-1.49	.	.	346	244	142	9	.	.	.	.	741
1.50-1.99	.	.	59	145	100	51	2	.	.	.	357
2.00-2.49	.	.	.	60	36	78	11	2	.	.	187
2.50-2.99	.	.	.	13	51	35	25	5	.	.	129
3.00-3.49	6	23	27	10	.	.	66
3.50-3.99	1	10	13	8	.	.	33
4.00-4.49	1	1	8	3	1	.	14
4.50-4.99	1	7	1	.	9
5.00-5.49	3	3	.	.	6
5.50-5.99	2	.	2
6.00-6.49	4	.	4
6.50-6.99	0
7.00+	0
TOTAL	224	924	1694	765	368	207	90	38	9	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=		6.2	MEAN TP(SEC)=		4.6	NO. OF CASES=		4059.		

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	286	705	310	31	1	1	.	.	.	.	1334
0.50-0.99	.	397	1557	258	14	3	.	.	.	.	2229
1.00-1.49	.	.	378	459	105	4	.	.	.	.	946
1.50-1.99	.	.	26	212	213	35	.	.	.	.	486
2.00-2.49	.	.	.	79	88	103	4	.	.	.	274
2.50-2.99	78	7	12	1	.	.	169
3.00-3.49	3	77	12	5	.	.	97
3.50-3.99	31	34	4	.	.	69
4.00-4.49	42	9	.	.	51
4.50-4.99	7	6	1	.	14
5.00-5.49	5	1	.	6
5.50-5.99	4	3	.	7
6.00-6.49	3	.	3
6.50-6.99	3	.	3
7.00+	0
TOTAL	286	1102	2271	1039	502	332	111	34	11	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=		6.7	MEAN TP(SEC)=		4.6	NO. OF CASES=		5336.		

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	243	743	258	13	1						1258
0.50-0.99		408	1486	185	12	2	.	.	.	.	2103
1.00-1.49			353	380	33			.	.	.	766
1.50-1.99			14	174	87	12		.	.	.	287
2.00-2.49				42	44	26		.	.	.	114
2.50-2.99					45	39	2		.	.	90
3.00-3.49					5	37	6	6		.	58
3.50-3.99						20	7			.	31
4.00-4.49						3	8	3	1	.	14
4.50-4.99							3			.	7
5.00-5.49								3		.	3
5.50-5.99									3	.	3
6.00-6.49										3	3
6.50-6.99											0
7.00+											0
TOTAL	243	1151	2121	794	227	139	36	18	9	0	
MEAN HS(M) = 0.9	LARGEST HS(M)=		6.3	MEAN TP(SEC)=		4.3	NO. OF CASES=		4448.		

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	361	1054	347	13	1	.	.	.	.	.	1776
0.50-0.99	.	568	1674	162	11	.	.	.	.	.	2415
1.00-1.49	.	.	532	319	39	5	.	.	.	.	895
1.50-1.99	.	.	16	309	60	10	.	.	.	.	395
2.00-2.49	.	.	.	97	40	12	2	.	.	.	151
2.50-2.99	.	.	.	2	83	17	2	2	.	.	106
3.00-3.49	6	54	5	3	.	.	69
3.50-3.99	34	6	.	1	.	41
4.00-4.49	3	23	5	.	.	31
4.50-4.99	1	9	.	.	10
5.00-5.49	1	5	1	1	8
5.50-5.99	4	1	.	5
6.00-6.49	2	1	3
6.50-6.99	1	.	1
7.00+
TOTAL	361	1622	2569	902	240	135	40	28	13	2	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 5545.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	429	777	333	19	1	.	.	.	.	.	1559
0.50-0.99	.	624	1020	174	16	1	.	.	.	.	1835
1.00-1.49	.	.	304	221	78	7	.	.	.	.	610
1.50-1.99	.	.	23	137	36	16	.	.	.	.	212
2.00-2.49	.	.	.	47	24	6	2	1	.	.	80
2.50-2.99	.	.	.	1	21	9	2	2	.	.	35
3.00-3.49	4	7	2	3	.	.	14
3.50-3.99	9	3	4	.	.	16
4.00-4.49	2	3	5	.	.	10
4.50-4.99	2	.	.	.	2
5.00-5.49	1	1	.	2
5.50-5.99	1	.	.	1
6.00-6.49	1	.	1
6.50-6.99	1	.	1
7.00+	0
TOTAL	429	1401	1680	599	180	57	12	17	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4106.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	482	1111	659	186	2	.	.	.	.	.	2440
0.50-0.99	.	1194	729	346	52	2	.	.	.	.	2323
1.00-1.49	.	.	318	162	53	10	1	.	.	.	544
1.50-1.99	.	.	43	65	37	14	.	.	.	.	159
2.00-2.49	.	.	2	4	26	16	1	.	.	.	49
2.50-2.99	2	9	.	.	.	.	11
3.00-3.49	1	1	.	.	.	2
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	482	2305	1751	763	172	52	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 5180.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	755	1413	500	168	6	.	.	.	.	.	2842
0.50-0.99	.	1943	435	183	51	3	.	.	.	.	2615
1.00-1.49	.	.	495	66	48	13	.	.	.	.	622
1.50-1.99	.	.	114	12	14	8	.	.	.	.	148
2.00-2.49	.	.	3	9	12	6	1	.	.	.	31
2.50-2.99	.	.	.	1	.	1	.	.	.	.	2
3.00-3.49	1	1	.	.	.	3
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	755	3356	1547	439	131	32	2	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 5868.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	737	1259	463	87	8	1	.	.	.	.	2555
0.50-0.99	.	1731	382	185	81	9	.	.	.	.	2388
1.00-1.49	.	.	752	51	48	11	.	.	.	.	862
1.50-1.99	.	.	236	3	19	11	1	.	.	.	270
2.00-2.49	.	.	10	23	1	8	1	1	.	.	44
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	1	.	.	0
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	737	2990	1843	350	157	40	2	2	0	0	5734.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5734.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	511	920	280	62	6	2	.	.	.	.	1781
0.50-0.99	.	1484	498	101	41	5	.	.	.	.	2129
1.00-1.49	.	.	468	21	25	17	.	.	.	.	531
1.50-1.99	.	.	253	43	3	4	.	.	.	.	303
2.00-2.49	.	.	2	29	1	.	.	.	.	.	32
2.50-2.99	.	.	.	2	.	.	.	1	.	.	2
3.00-3.49	1
3.50-3.99	1	.	.	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	511	2404	1501	258	76	28	0	1	0	0	4477.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4477.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	552	813	293	75	13	3	.	.	.	.	1749
0.50-0.99	.	1465	473	109	32	2	.	.	.	.	2081
1.00-1.49	.	.	377	7	23	6	.	.	.	.	413
1.50-1.99	.	.	160	26	6	6	.	.	.	.	192
2.00-2.49	.	.	.	16	.	.	1	.	.	.	17
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	1	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	552	2278	1303	235	68	17	1	0	1	0	4174.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 4174.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	665	1019	315	74	18	3	2	.	.	.	2096
0.50-0.99	.	1731	421	101	28	6	.	.	.	.	2287
1.00-1.49	.	.	487	17	19	6	.	.	.	.	529
1.50-1.99	.	.	146	10	2	.	.	.	.	.	158
2.00-2.49	.	.	.	18	.	.	.	.	.	.	18
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	665	2750	1369	221	68	15	2	0	0	0	4767.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 4767.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1047	1895	565	144	35	10	1	.	.	.	3697
0.50-0.99	.	2396	304	171	50	13	5	.	.	.	2939
1.00-1.49	.	.	718	13	48	9	.	.	.	.	788
1.50-1.99	.	.	141	.	7	2	1	.	.	.	151
2.00-2.49	.	.	3	1	.	1	.	.	.	.	6
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1047	4291	1731	331	140	35	8	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 7099.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1084	2560	557	122	13	12	.	.	.	.	4348
0.50-0.99	.	2990	845	188	65	19	1	.	.	.	4108
1.00-1.49	.	.	1512	21	35	8	3	.	.	.	1579
1.50-1.99	.	.	245	241	8	8	.	.	.	.	502
2.00-2.49	.	.	3	134	1	.	.	.	.	.	138
2.50-2.99	.	.	.	12	8	.	.	.	.	.	20
3.00-3.49	1	.	.	.	1	.	2
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1084	5550	3162	718	131	48	4	0	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10015.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	679	1488	590	96	6	3	.	.	.	.	2862
0.50-0.99	.	1519	2011	242	75	20	4	.	.	.	3871
1.00-1.49	.	.	2150	29	41	33	4	.	.	.	2257
1.50-1.99	.	.	242	782	8	6	8	3	.	.	1049
2.00-2.49	.	.	.	462	1	1	1	1	.	.	466
2.50-2.99	.	.	.	56	28	.	.	1	.	.	85
3.00-3.49	16	.	.	.	.	.	16
3.50-3.99	4	.	.	.	.	4
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	679	3007	4993	1667	175	68	17	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 9935.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	311	774	360	41	8	2	.	.	.	.	1496
0.50-0.99	.	681	1304	294	67	22	.	.	.	.	2368
1.00-1.49	.	.	1211	47	99	41	4	.	.	.	1412
1.50-1.99	.	.	233	459	26	77	27	3	.	.	825
2.00-2.49	.	.	.	401	66	31	22	9	.	.	463
2.50-2.99	.	.	.	83	14	.	6	17	3	.	175
3.00-3.49	14	.	1	9	2	.	26
3.50-3.99	3	1	.	.	.	.	6
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	311	1455	3108	1325	283	184	60	38	7	0	

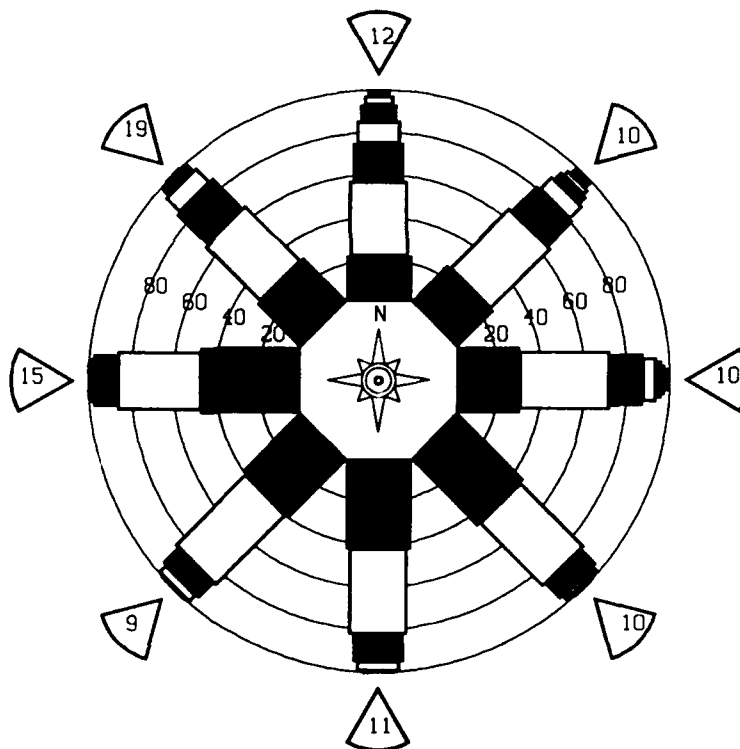
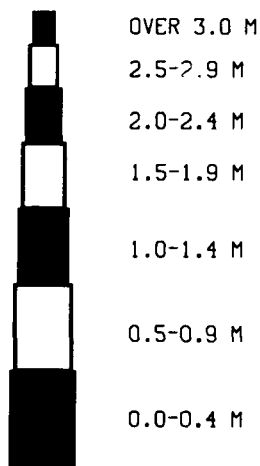
MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 6344.

STATION S44 46.95N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	865	1779	640	119	13	3	.	.	.	.	3419
0.50-0.99	.	2014	1547	335	67	12	1	.	.	.	3976
1.00-1.49	.	.	1126	218	101	23	1	.	.	.	1469
1.50-1.99	.	.	219	292	71	36	5	.	.	.	623
2.00-2.49	.	.	2	187	28	40	9	1	.	.	267
2.50-2.99	.	.	.	34	45	22	12	4	.	.	117
3.00-3.49	13	20	8	8	.	.	49
3.50-3.99	3	12	7	4	1	.	27
4.00-4.49	2	8	3	.	.	13
4.50-4.99	1	2	.	.	3
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	865	3793	3534	1185	341	170	52	23	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 44
46.95N, 87.93 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S44 (46.95N 87.93W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	0.8	1.1	1.0	0.7	0.6	0.6	0.4	0.6	0.9	1.1	1.1	0.8
1957	1.0	0.9	0.9	0.8	0.8	0.5	0.5	0.6	0.6	0.6	0.9	1.0	0.8
1958	0.9	1.3	0.6	0.6	0.6	0.5	0.5	0.4	0.6	0.7	1.1	1.1	0.8
1959	0.8	0.8	0.7	0.6	0.7	0.4	0.3	0.5	0.6	0.8	0.0	1.3	0.7
1960	0.9	1.1	0.9	0.8	0.9	0.4	0.4	0.5	0.6	0.7	1.1	0.0	0.8
1961	0.7	0.8	1.1	0.8	0.7	0.6	0.4	0.4	0.6	0.8	0.0	0.9	0.7
1962	1.1	0.9	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.8	0.0	0.9	0.7
1963	0.9	1.0	1.0	0.7	0.5	0.5	0.5	0.5	0.6	0.6	0.9	1.1	0.8
1964	1.0	1.1	1.2	0.9	0.7	0.6	0.5	0.6	0.6	0.6	0.9	1.1	0.8
1965	1.1	1.3	1.3	0.8	0.7	0.7	0.6	0.7	0.7	1.1	1.1	1.1	0.8
1966	1.1	1.1	1.3	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8
1967	1.1	1.4	1.1	1.1	1.0	0.8	0.8	0.8	0.8	1.1	1.1	1.1	0.8
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8
1971	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.0	1.0	1.1	0.8	0.7	0.5	0.5	0.5	0.6	0.8	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S44 (46.95N 87.93W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.5	4.3	6.7	3.9	3.1	1.6	1.5	1.5	1.8	2.6	4.3	5.2	
1957	2.2	2.3	3.0	4.2	3.2	1.3	1.6	1.5	2.3	3.0	3.3	4.0	
1958	2.9	4.7	2.2	5.0	1.7	1.9	1.7	1.8	1.9	2.0	4.7	3.1	
1959	2.0	2.7	5.0	2.1	2.0	1.2	1.0	1.7	2.0	2.1	3.6	6.3	
1960	3.4	4.6	3.1	2.8	3.5	1.4	1.2	1.5	2.0	2.5	4.3	2.2	
1961	2.4	3.5	3.2	2.5	2.7	1.6	1.3	1.9	2.0	2.8	3.2	2.7	
1962	3.1	2.8	4.0	2.9	2.0	1.1	1.4	1.6	1.8	2.1	2.5	3.0	
1963	3.5	3.6	3.2	3.2	1.5	1.6	1.1	2.4	3.1	1.9	3.9	4.7	
1964	5.0	2.6	4.4	2.9	2.0	1.6	1.4	1.9	1.8	2.7	2.9	2.6	
1965	4.3	6.2	4.9	2.9	2.2	1.8	1.8	2.4	2.1	3.3	6.9	4.4	
1966	4.2	2.9	6.7	4.2	2.6	2.0	2.6	2.1	2.3	3.8	6.4	3.6	
1967	5.9	4.7	3.1	3.1	2.8	1.9	2.0	4.0	2.4	2.8	3.5	3.9	
1968	3.9	4.9	4.4	3.5	2.2	2.1	2.1	1.9	3.7	3.7	5.8		
1969	3.5	4.3	5.7	4.0	2.6	1.9	2.0	2.1	2.1	3.6	2.7	3.9	
1970	4.0	4.0	5.1	4.2	2.6	2.0	2.5	2.1	3.1	2.6	5.2	6.3	
1971	2.7	4.1	4.7	2.6	3.3	1.5	1.3	1.3	1.5	3.7	3.2	3.7	
1972	3.0	3.8	4.7	2.6	3.3	1.3	1.5	1.7	2.6	4.1	4.3	3.8	
1973	2.1	3.9	3.3	2.9	3.2	1.7	1.2	1.3	1.6	3.0	4.1		
1974	2.1	3.1	3.6	3.4	1.7	1.7	1.2	1.2	1.3	2.0	4.4	4.3	
1975	3.6	2.5	5.5	2.4	1.3	1.6	1.6	1.9	2.2	2.4	6.7	2.8	
1976	3.1	3.7	6.0	3.9	2.4	2.0	1.6	1.3	1.8	1.9	2.5	2.6	
1977	2.4	5.9	4.4	2.6	1.7	1.8	1.5	1.0	4.7	2.7	2.6	6.0	
1978	4.0	3.3	2.7	2.6	1.4	1.4	1.3	1.2	2.5	2.4	2.6	2.9	
1979	2.6	3.2	3.7	3.8	2.1	1.5	1.1	1.3	1.6	4.4	2.5	2.6	
1980	2.4	3.3	3.5	3.5	1.5	1.6	0.9	1.2	2.0	2.2	1.8	2.3	
1981	2.2	2.2	2.6	2.1	2.2	1.6	1.1	1.3	2.7	3.9	3.1	2.1	
1982	5.0	2.2	2.9	2.6	2.2	1.5	1.9	1.1	3.4	3.4	2.5	2.3	
1983	3.8	5.5	3.9	2.3	2.5	1.4	1.6	1.5	1.3	2.1	4.8	4.1	
1984	2.8	4.2	4.0	2.8	1.4	1.5	1.1	1.2	1.6	3.7	3.1	3.1	
1985	2.8	2.5	7.0	4.1	1.5	1.8	0.8	1.2	1.6	2.0	4.4	6.1	
1986	2.9	2.9	3.8	2.9	2.6	1.4	0.9	1.1	2.0	2.5	2.3	2.2	
1987	2.4	4.0	4.1	3.3	1.8	1.0	1.7	1.3	1.8	2.8	2.7	3.6	

32 YR. STATISTICS FOR WIS STATION S44

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85030418

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	294	997	333	23	2	1	.	.	.	.	1650
0.50-0.99	.	572	1569	303	22	7	.	.	.	.	2473
1.00-1.49	.	.	868	238	136	21	.	.	.	.	1263
1.50-1.99	.	.	205	310	174	67	3	.	.	.	759
2.00-2.49	.	.	.	377	64	125	17	1	.	.	584
2.50-2.99	.	.	.	139	52	140	81	6	.	.	418
3.00-3.49	.	.	.	5	64	26	99	33	.	.	227
3.50-3.99	26	4	26	63	5	.	124
4.00-4.49	2	7	3	38	6	.	56
4.50-4.99	6	.	12	22	.	40
5.00-5.49	1	.	1	8	.	10
5.50-5.99	5	.	5
6.00-6.49	2	.	1	.	3
6.50-6.99	1	.	1
7.00+	2	2
TOTAL	294	1569	2975	1395	542	405	231	154	48	2	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 7139.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	201	617	247	14	2	.	.	.	.	.	1081
0.50-0.99	.	451	1402	213	5	5	.	.	.	.	2072
1.00-1.49	.	.	382	360	78	5	.	.	.	.	825
1.50-1.99	.	.	66	194	180	14	.	.	.	.	454
2.00-2.49	.	.	.	55	83	70	2	.	.	.	210
2.50-2.99	.	.	.	8	75	65	10	.	.	.	158
3.00-3.49	5	63	25	3	.	.	96
3.50-3.99	25	26	7	.	.	58
4.00-4.49	3	21	10	1	.	35
4.50-4.99	5	16	.	.	21
5.00-5.49	2	3	.	6
5.50-5.99	1	3	.	4
6.00-6.49	1	3	.	4
6.50-6.99	1	.	1
7.00+	0
TOTAL	201	1068	2097	844	428	246	90	40	11	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 4715.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	242	767	267	13	1	.	.	.	.	.	1290
0.50-0.99	.	428	1811	180	10	.	1	.	.	.	2430
1.00-1.49	.	.	414	549	54	1	.	.	.	.	1018
1.50-1.99	.	.	26	237	194	14	.	.	.	.	471
2.00-2.49	.	.	.	82	103	86	.	.	.	.	271
2.50-2.99	.	.	.	1	108	72	5	1	.	.	187
3.00-3.49	5	98	9	.	.	.	112
3.50-3.99	35	41	.	.	.	76
4.00-4.49	3	43	7	.	.	53
4.50-4.99	10	9	.	.	19
5.00-5.49	8	.	.	8
5.50-5.99	3	4	.	7
6.00-6.49	4	.	4
6.50-6.99	2	.	2
7.00+	0
TOTAL	242	1195	2518	1062	475	309	109	28	10	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5581.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	208	773	159	8	.	.	.	.	.	.	1148
0.50-0.99	.	388	1654	110	5	.	.	.	.	.	2157
1.00-1.49	.	.	313	379	27	1	.	.	.	.	720
1.50-1.99	.	.	14	149	103	7	.	.	.	.	273
2.00-2.49	.	.	.	24	45	27	.	.	.	.	96
2.50-2.99	.	.	.	1	41	32	8	.	.	.	82
3.00-3.49	1	43	7	6	.	.	57
3.50-3.99	12	9	1	1	.	23
4.00-4.49	8	6	.	.	14
4.50-4.99	5	.	.	5
5.00-5.49	5	1	.	6
5.50-5.99	2	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	208	1161	2140	671	222	122	32	23	5	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 4302.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	237	701	173	10	6	.	.	.	.	.	1121
0.50-0.99	.	427	1264	103	6	.	.	.	.	.	1800
1.00-1.49	.	.	314	273	27	2	.	.	.	.	616
1.50-1.99	.	.	8	173	64	8	.	.	.	.	253
2.00-2.49	.	.	.	52	34	16	1	.	.	.	103
2.50-2.99	.	.	.	2	40	16	3	2	.	.	63
3.00-3.49	5	44	6	1	.	.	56
3.50-3.99	27	7	1	1	.	36
4.00-4.49	13	2	.	.	15
4.50-4.99	2	6	.	.	8
5.00-5.49	7	1	.	8
5.50-5.99	1	2	.	3
6.00-6.49	5	.	5
6.50-6.99	0
7.00+	0
TOTAL	237	1128	1759	613	176	113	32	20	9	0	
MEAN HS(M) = 0.9	LARGEST HS(M)= 6.4		MEAN TP(SEC)= 4.2		NO. OF CASES= 3836						

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	196	529	144	6	1	.	.	.	.	.	876
0.50-0.99	.	316	1022	111	2	.	.	.	.	.	1451
1.00-1.49	.	.	249	211	45	2	.	.	.	.	507
1.50-1.99	.	.	20	155	34	14	.	.	.	.	223
2.00-2.49	.	.	.	45	13	12	.	1	.	.	72
2.50-2.99	.	.	.	1	47	2	2	1	.	.	53
3.00-3.49	2	18	.	2	.	.	22
3.50-3.99	13	3	2	.	.	21
4.00-4.49	7	6	.	.	13
4.50-4.99	1	2	.	.	3
5.00-5.49	1	.	1	3
5.50-5.99	1	.	1
6.00-6.49	2	.	2
6.50-6.99	1	1
7.00+	0
TOTAL	196	845	1435	529	144	61	14	18	4	2	
MEAN HS(M) = 0.9	LARGEST HS(M)=	6.7	MEAN TP(SEC)=	4.2	NO. OF CASES=	3050.					

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49											
0.50-0.99	312	1020	694	32							2058
1.00-1.49		851	1498	432	26	1	.	.	.	.	2808
1.50-1.99	.	.	566	265	98	12	.	.	.	.	941
2.00-2.49	.	.	79	167	44	6	.	.	.	.	296
2.50-2.99	.	.	2	56	22	14	1	.	.	.	95
3.00-3.49	.	.	.	.	45	5	2	.	.	.	52
3.50-3.99	.	.	.	.	8	2	.	.	.	.	10
4.00-4.49	.	.	.	.	.	.	.	1	.	.	3
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	312	1871	2839	952	243	42	3	1	0	0	
MEAN HS(M) = 0.7	LARGEST HS(M)=	3.8	MEAN TP(SEC)=	4.0	NO. OF CASES=	5867					

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49											2815
0.50-0.99	558	1397	795	65							3689
1.00-1.49		2334	758	565	31	1	.	.	.	.	1078
1.50-1.99	.	.	897	109	66	6	.	.	.	.	335
2.00-2.49	.	.	269	44	18	4	.	.	.	.	36
2.50-2.99	.	.	10	20	3	3	.	.	.	.	17
3.00-3.49	.	.	.	6	11		.	.	.	.	7
3.50-3.99	.	.	.	1	3		3	.	.	.	2
4.00-4.49	.	.	.	.	.		2	.	.	.	2
4.50-4.99	.	.	.	.	.			1	1	.	0
5.00-5.49	.	.	.	.	.			.	.	.	0
5.50-5.99	.	.	.	.	.			.	.	.	0
6.00-6.49	.	.	.	.	.			.	.	.	0
6.50-6.99	.	.	.	.	.			.	.	.	0
7.00+	.	.	.	.	.			.	.	.	0
TOTAL	558	3731	2729	810	132	19	1	1	0	0	0
MEAN HS(M) = 0.7	LARGEST HS(M)=		4.3	MEAN TP(SEC)=		3.6	NO. OF CASES=		7472.		

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =180.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	582	1188	370	44	3						2187
0.50-0.99		1660	495	185	38	9					2387
1.00-1.49			668	56	54	14					792
1.50-1.99			348	5	13	7	2				375
2.00-2.49			20	33	1	2	2				58
2.50-2.99				3		1					4
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	582	2848	1901	326	109	33	4	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5436.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =202.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	427	864	249	50	2						1592
0.50-0.99		1457	510	121	27	3					2118
1.00-1.49			455	23	37	13					528
1.50-1.99			278	53	7	5	1				344
2.00-2.49			2	53		1	1				57
2.50-2.99				4				1			5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	427	2321	1494	304	73	22	2	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4351.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =225.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	426	857	306	38	3	2					1632
0.50-0.99		1593	483	114	33	5					2228
1.00-1.49			460	11	24	5					500
1.50-1.99			248	34		5					287
2.00-2.49				27							27
2.50-2.99				3							3
3.00-3.49											0
3.50-3.99									1		1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	426	2450	1497	227	60	17	0	0	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4383.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =247.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	425	840	265	50	17		1				1585
0.50-0.99		1614	741	88	4	2	1				2463
1.00-1.49			612	22	20	5					659
1.50-1.99			254	109	3	1					367
2.00-2.49				50							50
2.50-2.99				8	2						10
3.00-3.49					3						3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	425	2454	1872	327	49	8	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4811.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 6544.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 9969.

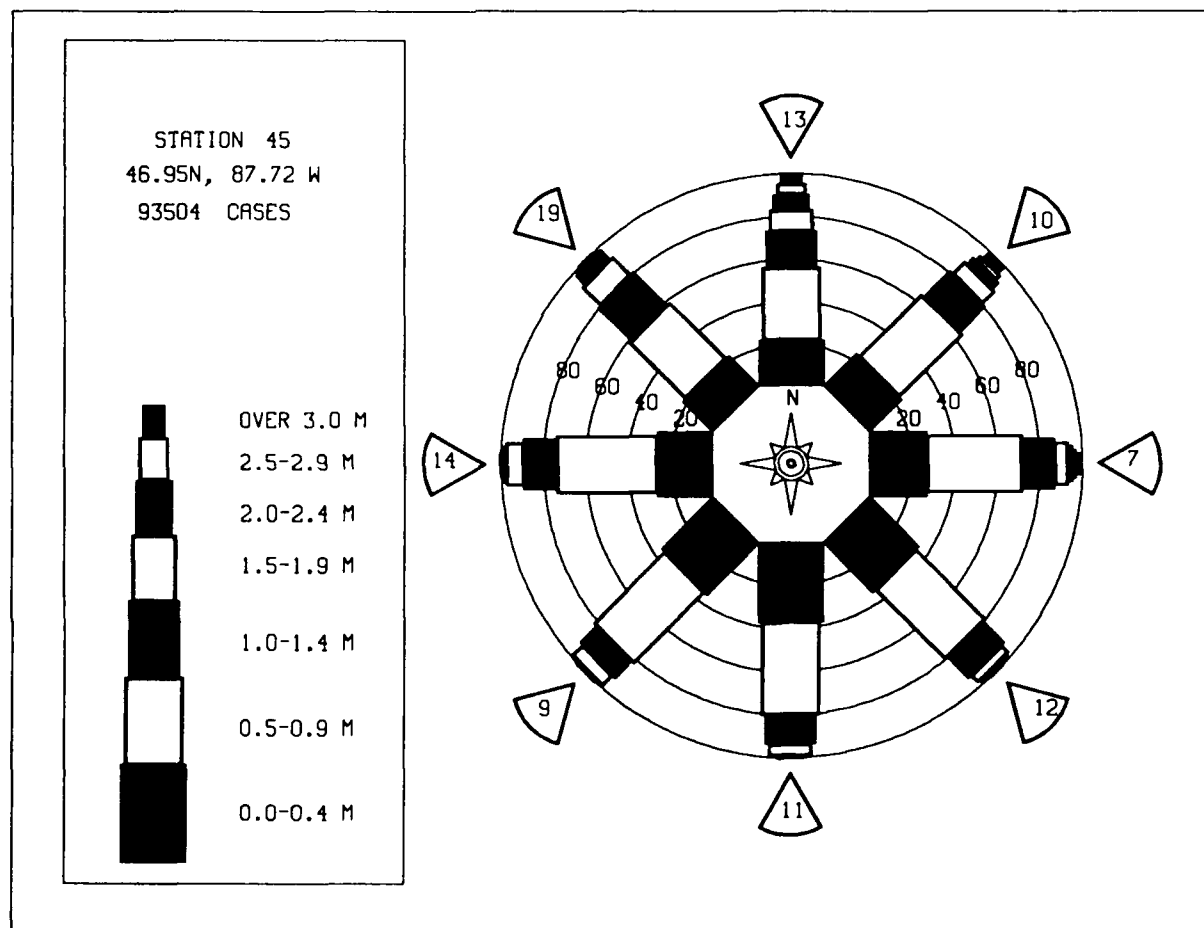
STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 9428.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6620.

STATION S45 46.95N 87.72W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	590	1501	518	53	5	1	.	.	.	.	2668
0.50-0.99	.	1739	2102	329	41	17	.	.	.	.	4218
1.00-1.49	.	.	1254	273	86	16	.	.	.	.	1629
1.50-1.99	.	.	297	404	91	23	.	.	.	.	817
2.00-2.49	.	.	3	255	38	41	2	.	.	.	342
2.50-2.99	.	.	.	45	60	35	14	2	.	.	1566
3.00-3.49	17	30	15	9	1	.	69
3.50-3.99	3	13	11	7	.	.	37
4.00-4.49	2	9	5	2	.	18
4.50-4.99	2	.	.	9
5.00-5.49	2	1	.	3
5.50-5.99	1	.	1
6.00-6.49	1
6.50-6.99	0
7.00+	0
TOTAL	590	3240	4174	1359	341	168	58	32	6	0	
MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.											



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S45 (46.95N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.9	1.1	1.0	0.8	0.6	0.6	0.5	0.7	1.0	1.2	1.2	0.8
1957	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1958	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1959	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1960	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1961	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1962	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1963	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1964	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1965	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1966	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1967	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1968	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1969	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1970	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1971	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1972	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1973	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1974	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1975	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1976	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1977	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1978	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1979	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1980	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1981	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1982	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1983	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1984	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1985	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1986	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
1987	1.1	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.9
MEAN	1.1	1.1	1.2	0.9	0.7	0.6	0.5	0.5	0.7	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S45 (46.95N 87.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	4.3	6.2	3.7	2.6	1.6	1.5	1.5	1.9	2.4	4.2	4.9	
1957	2.5	2.6	2.8	3.8	3.1	2.0	1.8	1.6	2.8	3.0	3.3	4.2	
1958	2.0	4.7	2.1	5.0	2.2	2.4	1.4	1.8	1.9	2.1	4.8	3.3	
1959	2.0	2.7	4.8	2.1	2.0	1.3	1.4	1.4	2.2	4.4	3.4	6.1	
1960	2.0	2.7	3.2	2.5	3.8	1.6	1.3	1.8	2.2	6.6	3.9	2.6	
1961	2.0	3.8	3.8	2.5	2.5	1.7	1.5	2.0	2.1	2.2	3.6	2.8	
1962	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1963	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1964	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1965	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1966	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1967	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1968	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1969	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1970	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1971	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1972	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1973	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1974	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1975	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1976	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1977	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1978	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1979	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1980	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1981	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1982	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1983	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1984	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1985	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1986	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	
1987	2.0	3.8	3.8	2.5	2.3	1.3	1.9	2.1	1.9	2.2	3.6	2.8	

32 YR. STATISTICS FOR WIS STATION S45

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	6.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.7 LARGEST HS(M)= 10.0 MEAN TP(SEC)= 5.3 NO. OF CASES= 9467.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 6139.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 7431.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 3471.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	118	442	130	2	1	.	.	.	.	.	693
0.50-0.99	.	359	1081	97	5	1	.	.	.	.	1543
1.00-1.49	.	.	233	257	32	.	.	.	.	.	522
1.50-1.99	.	.	12	108	56	4	.	.	.	.	180
2.00-2.49	.	.	.	33	19	24	.	.	.	.	76
2.50-2.99	35	22	3	2	.	.	62
3.00-3.49	2	32	7	4	.	.	45
3.50-3.99	18	6	6	.	.	30
4.00-4.49	10	9	.	.	19
4.50-4.99	3	10	.	.	13
5.00-5.49	5	.	1	6
5.50-5.99	1	4	.	5
6.00-6.49	1	.	1
6.50-6.99	1
7.00+	0
TOTAL	118	801	1456	497	150	101	29	37	6	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 3001.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	95	319	91	5	.	.	.	.	.	.	510
0.50-0.99	.	271	849	95	4	.	.	.	.	.	1219
1.00-1.49	.	.	235	159	39	1	.	.	.	.	434
1.50-1.99	.	.	19	91	37	11	.	.	.	.	158
2.00-2.49	.	.	.	28	33	12	2	.	.	.	55
2.50-2.99	24	8	1	1	.	.	34
3.00-3.49	2	7	1	1	.	.	11
3.50-3.99	7	2	2	.	.	9
4.00-4.49	5	.	.	.	5
4.50-4.99	1	2	.	.	3
5.00-5.49	1	.	.	0
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	95	590	1194	378	119	46	12	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 2293.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	127	589	199	10	1	.	.	.	.	.	926
0.50-0.99	.	859	1321	115	10	.	.	.	.	.	2305
1.00-1.49	.	.	641	151	51	1	.	.	.	.	844
1.50-1.99	.	.	101	183	21	5	.	.	.	.	310
2.00-2.49	.	.	2	95	11	6	.	.	.	.	114
2.50-2.99	.	.	.	16	6	2	1	.	.	.	25
3.00-3.49	4	1	.	.	.	5
3.50-3.99	1	.	1	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	127	1448	2264	570	100	19	2	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4248.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	276	1310	223	13	1	.	.	.	.	.	1823
0.50-0.99	.	2471	903	227	4	.	.	.	.	.	3605
1.00-1.49	.	.	1194	105	55	3	.	.	.	.	1357
1.50-1.99	.	.	309	68	20	3	.	.	.	.	400
2.00-2.49	.	.	14	36	7	2	.	.	.	.	59
2.50-2.99	.	.	.	10	5	2	1	.	.	.	18
3.00-3.49	0
3.50-3.99	1	.	.	.	1
4.00-4.49	2	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	276	3781	2643	459	92	10	2	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 6804.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	402	1340	349	38	9	.	.	.	.	.	2138
0.50-0.99	.	2708	788	266	39	1	.	.	.	.	3802
1.00-1.49	.	.	1558	95	74	13	.	.	.	.	1740
1.50-1.99	.	.	745	5	9	10	.	.	.	.	769
2.00-2.49	.	.	34	72	2	4	2	.	.	.	114
2.50-2.99	.	.	.	8	.	1	.	.	.	.	9
3.00-3.49	.	.	.	2	.	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	402	4048	3474	486	133	29	2	0	0	0	8027.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 8027.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	271	922	269	53	5	.	.	.	.	.	1520
0.50-0.99	.	2291	856	213	49	2	.	.	.	.	3411
1.00-1.49	.	.	905	40	43	3	.	.	.	.	991
1.50-1.99	.	.	859	102	5	5	.	.	.	.	971
2.00-2.49	.	.	7	112	.	2	.	.	.	.	121
2.50-2.99	.	.	.	12	.	.	1	.	.	.	13
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	271	3213	2896	532	102	12	1	0	0	0	6582.

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 6582.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	283	688	245	36	5	.	.	.	.	.	1257
0.50-0.99	.	1796	614	158	29	5	1	.	.	.	2603
1.00-1.49	.	.	472	24	25	8	.	.	.	.	529
1.50-1.99	.	.	385	62	3	3	.	.	.	.	453
2.00-2.49	.	.	1	57	1	.	.	.	.	.	59
2.50-2.99	.	.	.	8	.	1	.	.	.	.	9
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	1	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	283	2484	1717	345	65	17	1	0	1	0	4604.

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4604.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	262	612	221	48	9	1	.	.	.	.	1153
0.50-0.99	.	1297	434	164	35	11	1	.	.	.	1942
1.00-1.49	.	.	396	35	36	13	1	.	.	.	481
1.50-1.99	.	.	162	19	3	1	2	.	.	.	187
2.00-2.49	.	.	.	22	.	.	.	.	.	.	22
2.50-2.99	.	.	.	5	.	.	.	.	.	.	5
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	262	1909	1213	294	83	26	4	0	0	0	3553.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3553.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =270.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	LONGER
0.00-0.49	393	953	412	103	25	3	.	.	.	.	1890
0.50-0.99	.	1378	545	319	130	39	.	.	.	.	2411
1.00-1.49	.	.	445	115	69	44	2	2	.	.	677
1.50-1.99	.	.	164	9	29	20	2	.	.	.	224
2.00-2.49	.	.	4	6	4	5	.	.	1	.	23
2.50-2.99	.	.	.	1	2	.	2	.	.	.	33
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	393	2331	1570	553	260	111	11	2	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4906.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =292.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	LONGER
0.00-0.49	398	1285	394	65	14	1	.	.	.	.	2157
0.50-0.99	.	2143	991	371	101	26	.	.	.	.	3632
1.00-1.49	.	.	984	159	84	50	4	.	.	.	1281
1.50-1.99	.	.	325	102	27	31	6	.	.	.	491
2.00-2.49	.	.	24	80	9	6	5	.	.	.	124
2.50-2.99	.	.	.	6	28	1	.	.	.	.	35
3.00-3.49	.	.	.	1	4	1	.	.	.	.	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	398	3428	2718	784	267	116	15	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 7237.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =315.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	LONGER
0.00-0.49	216	720	356	29	4	1	.	.	.	.	1326
0.50-0.99	.	1396	2051	470	71	12	.	.	.	.	4000
1.00-1.49	.	.	1454	458	131	60	5	.	.	.	2108
1.50-1.99	.	.	294	814	73	52	2	.	.	.	1235
2.00-2.49	.	.	8	612	68	36	9	2	.	.	735
2.50-2.99	.	.	.	47	364	4	7	.	.	.	422
3.00-3.49	98	40	4	1	.	.	143
3.50-3.99	4	17	2	.	.	.	23
4.00-4.49	6	.	1	.	.	7
4.50-4.99	3	2	.	.	.	5
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	216	2116	4163	2430	813	231	32	4	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 9372.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =337.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	LONGER
0.00-0.49	140	410	173	10	5	1	.	.	.	.	739
0.50-0.99	.	499	1372	242	40	21	.	.	.	.	2154
1.00-1.49	.	1	943	295	99	22	.	.	.	.	1360
1.50-1.99	.	.	130	680	90	53	1	.	.	.	954
2.00-2.49	.	.	.	495	90	60	19	.	.	.	654
2.50-2.99	.	.	.	54	411	28	13	2	.	.	508
3.00-3.49	153	67	7	2	.	.	231
3.50-3.99	2	93	9	3	.	.	109
4.00-4.49	13	25	3	.	.	43
4.50-4.99	8	10	.	.	18
5.00-5.49	11	4	.	15
5.50-5.99	2	1	.	3
6.00-6.49	1	.	2
6.50-6.99	1
7.00+	0
TOTAL	140	910	2618	1776	892	338	72	37	8	0	

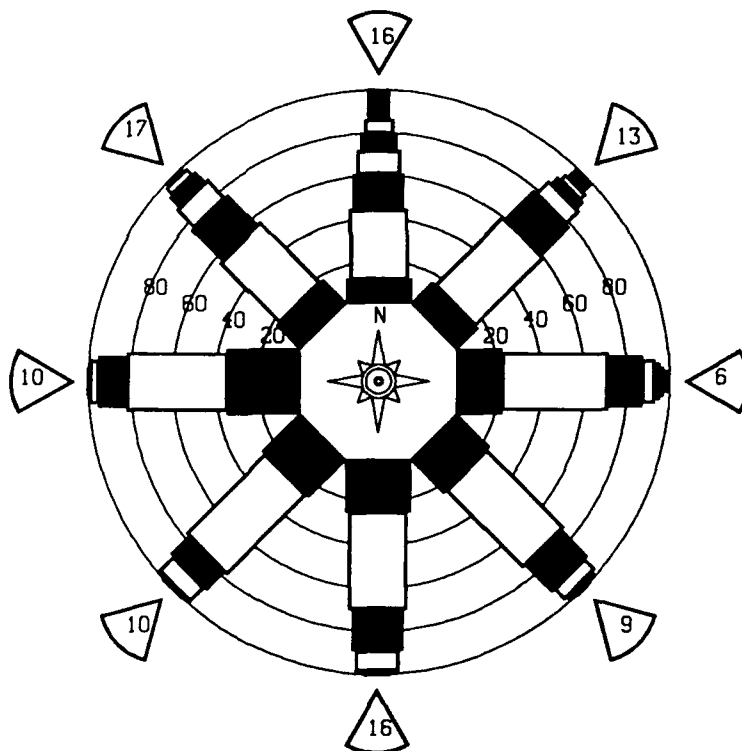
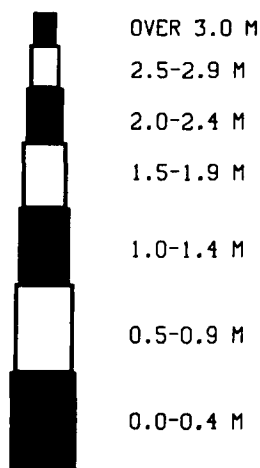
MEAN HS(M) = 1.4 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 6369.

STATION S46 46.80N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	356	1210	366	47	8	10	.	.	.	.	1987
0.50-0.99	.	1987	2000	341	56	23	.	.	.	.	4394
1.00-1.49	.	.	1209	390	96	27	1	.	.	.	1719
1.50-1.99	.	.	375	398	92	27	1	.	.	.	893
2.00-2.49	.	.	9	255	68	39	3	.	.	.	374
2.50-2.99	.	.	.	19	195	55	6	.	.	.	245
3.00-3.49	38	90	4	1	.	.	133
3.50-3.99	71	11	2	.	.	84
4.00-4.49	12	40	5	.	.	57
4.50-4.99	1	19	17	.	.	37
5.00-5.49	18	.	.	18
5.50-5.99	8	.	.	12
6.00-6.49	1	4	.	9
6.50-6.99	3	.	4
7.00+	1	.
TOTAL	356	3197	3959	1450	553	298	85	52	19	1	

MEAN HS(M)= 1.0 LARGEST HS(M)= 10.0 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.

STATION 46
46.80N, 87.50 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S46 (46.80N 87.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	0.9	1.0	1.0	0.7	0.5	0.5	0.4	0.6	0.9	1.2	1.2	0.8
1957	1.1	1.4	1.2	1.1	1.0	0.8	0.8	0.6	1.1	1.0	1.1	1.1	1.1
1958	1.1	1.8	1.0	1.1	1.1	0.9	0.8	0.6	0.8	0.9	1.1	1.1	1.1
1959	0.9	0.8	0.8	0.7	0.7	0.4	0.4	0.5	0.6	0.9	1.0	1.1	0.7
1960	1.1	1.5	1.2	1.1	1.1	1.2	0.6	0.3	0.7	0.9	1.2	1.1	1.1
1961	0.9	1.1	1.4	0.9	0.8	0.7	0.6	0.6	0.9	1.1	1.1	1.1	0.9
1962	1.1	1.2	1.0	1.1	1.0	0.7	0.6	0.7	0.7	0.9	1.1	1.1	0.9
1963	1.1	1.4	1.5	1.0	0.8	0.7	0.7	0.8	0.8	0.9	1.1	1.1	1.1
1964	1.1	1.2	1.1	1.1	0.8	0.8	0.8	0.6	0.9	1.1	1.0	1.1	1.1
1965	1.1	1.1	1.1	1.0	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1966	1.1	1.1	2.0	1.1	1.1	1.2	0.7	0.8	0.9	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.4	1.2	1.0	0.7	0.7	1.0	1.0	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.7	0.8	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1981	0.9	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.8	1.1	1.1	1.1	1.1	1.1
MEAN	1.3	1.3	1.4	1.1	0.8	0.7	0.6	0.6	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S46 (46.80N 87.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.0	4.3	5.8	3.6	2.3	1.8	1.4	1.3	2.1	2.8	4.0	4.7	
1957	3.6	4.1	3.4	3.4	3.4	2.5	2.5	2.4	3.5	3.7	6.3	6.1	
1958	4.4	4.9	2.7	5.1	2.5	3.0	2.0	2.2	3.1	2.5	5.1	3.7	
1959	2.5	2.7	4.8	2.2	1.9	1.3	1.1	1.3	2.2	3.3	3.4	5.7	
1960	4.1	6.7	4.7	3.5	4.9	2.6	2.2	1.6	2.5	4.0	5.0	3.9	
1961	4.4	4.4	4.7	2.9	3.1	2.8	1.7	2.3	2.8	4.0	4.7	3.8	
1962	3.8	4.6	4.1	4.3	2.4	1.9	2.3	2.4	2.4	3.9	3.6	5.1	
1963	3.9	4.9	6.6	5.0	2.2	2.7	2.6	3.4	3.9	3.0	5.5	6.8	
1964	3.8	4.9	6.0	4.9	3.0	3.1	2.2	2.8	3.1	5.6	3.1	2.9	
1965	5.6	7.2	6.5	4.0	2.8	2.7	2.2	3.6	2.9	5.5	6.5	6.8	
1966	5.3	5.1	6.7	4.1	3.8	3.1	3.2	3.4	3.1	6.2	10.0	4.6	
1967	5.8	6.1	5.4	4.5	3.1	2.1	3.6	4.2	4.0	4.2	3.8	3.9	
1968	5.4	7.9	7.4	6.0	3.6	2.8	2.3	3.3	2.9	6.2	5.9	6.3	
1969	4.5	7.0	7.3	4.9	3.5	2.7	2.8	2.2	3.3	4.0	3.8	6.7	
1970	6.7	6.4	5.9	4.2	4.3	2.9	4.0	3.0	3.5	2.9	5.3	6.6	
1971	3.7	4.1	4.2	2.8	3.2	1.5	1.3	1.2	1.7	4.1	4.1	3.8	
1972	3.6	3.6	4.6	3.0	1.3	1.3	1.3	2.3	3.3	5.3	4.4	4.9	
1973	5.5	4.9	6.4	4.2	4.9	1.7	2.0	2.5	2.6	4.2	3.8	5.2	
1974	3.0	5.5	3.0	4.3	2.3	1.1	2.2	2.1	2.6	4.1	4.4	6.1	
1975	4.7	3.2	5.1	2.8	2.4	2.3	1.9	2.3	2.7	3.3	7.5	4.7	
1976	5.5	6.1	7.1	4.7	3.4	2.7	2.8	2.2	3.1	2.4	3.7	5.0	
1977	3.8	5.2	3.8	4.2	2.8	2.9	2.1	2.1	3.8	3.8	3.9	4.9	
1978	7.7	4.3	3.5	3.7	4.6	2.6	2.4	1.7	2.3	4.5	4.3	3.0	
1979	4.6	4.5	7.3	3.6	2.0	3.0	2.1	2.6	2.9	6.7	3.4	4.4	
1980	3.4	4.3	3.8	4.6	3.0	2.4	1.7	1.7	2.7	3.0	2.4	4.1	
1981	3.1	4.6	4.3	3.8	3.9	1.9	1.7	2.2	3.1	4.8	5.4	3.7	
1982	5.7	4.3	4.5	4.0	3.2	2.5	3.2	1.7	4.2	6.3	5.4	4.3	
1983	6.7	6.9	6.9	3.2	3.4	1.9	1.5	2.0	2.1	2.9	4.8	5.0	
1984	4.3	6.1	7.4	4.7	2.9	2.1	1.7	2.3	2.0	2.6	5.1	4.1	
1985	5.1	3.1	5.7	5.3	2.5	2.4	1.3	1.8	1.9	3.3	3.7	8.6	
1986	3.3	6.6	6.6	4.5	2.8	2.3	1.4	1.7	2.1	2.9	2.6	2.7	
1987	4.5	7.8	6.1	4.8	1.9	1.5	1.4	2.1	2.6	6.1	5.3	5.5	

32 YR. STATISTICS FOR WIS STATION S46

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	0.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	10.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	10.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 0.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	124	578	112	13	3	1	.	.	.	.	831
0.50-0.99	.	725	2027	208	32	2	.	.	.	.	2994
1.00-1.49	.	.	845	697	100	11	.	.	.	.	1653
1.50-1.99	.	.	126	806	227	56	.	.	.	.	1215
2.00-2.49	.	.	.	527	228	121	2	.	.	.	878
2.50-2.99	.	.	.	21	658	91	11	3	.	.	784
3.00-3.49	109	585	17	4	.	.	715
3.50-3.99	1	435	52	1	.	.	489
4.00-4.49	103	264	26	.	.	393
4.50-4.99	5	171	145	.	.	321
5.00-5.49	1	13	219	2	.	235
5.50-5.99	89	56	.	145
6.00-6.49	13	67	.	80
6.50-6.99	63	.	63
7.00+	48	48	96
TOTAL	124	1303	3110	2272	1358	1411	530	500	236	48	

MEAN HS(M) = 2.0 LARGEST HS(M)= 11.1 MEAN TP(SEC)= 5.6 NO. OF CASES= 10205.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	469	77	9	2	1	.	.	.	.	641
0.50-0.99	.	531	2034	105	17	7	.	.	.	.	2688
1.00-1.49	.	.	682	559	34	1	.	.	.	.	1283
1.50-1.99	.	.	62	419	159	9	.	1	.	.	650
2.00-2.49	.	.	.	193	122	43	.	.	.	.	358
2.50-2.99	.	.	.	4	202	66	3	1	.	.	276
3.00-3.49	25	167	.	1	.	.	194
3.50-3.99	110	11	1	1	.	123
4.00-4.49	10	62	3	2	.	77
4.50-4.99	35	27	1	.	63
5.00-5.49	24	1	.	25
5.50-5.99	9	7	.	16
6.00-6.49	3	8	.	11
6.50-6.99	7	1	8
7.00+	2	3	9
TOTAL	84	1000	2855	1289	561	413	113	70	34	23	

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 6022.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	126	664	86	10	25	2	.	.	.	.	886
0.50-0.99	.	564	2809	80	25	4	.	.	.	.	3480
1.00-1.49	.	.	835	793	48	4	.	.	.	.	1680
1.50-1.99	.	.	64	521	154	14	.	.	.	.	753
2.00-2.49	.	.	.	199	122	62	1	.	.	.	384
2.50-2.99	.	.	.	2	213	54	3	.	.	.	272
3.00-3.49	12	182	5	.	.	.	199
3.50-3.99	135	24	1	.	.	160
4.00-4.49	14	97	3	.	.	114
4.50-4.99	1	21	37	.	.	59
5.00-5.49	26	.	.	26
5.50-5.99	8	3	.	11
6.00-6.49	7	.	9
6.50-6.99	9	.	2
7.00+	2	0	
TOTAL	126	1228	3794	1605	574	468	151	75	21	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 7538.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	110	408	74	5	.	.	.	.	.	.	597
0.50-0.99	.	360	1449	69	18	3	.	.	.	.	1899
1.00-1.49	.	.	288	209	23	5	.	.	.	.	525
1.50-1.99	.	.	7	99	33	9	.	1	.	.	149
2.00-2.49	.	.	.	34	12	20	2	.	.	.	68
2.50-2.99	31	6	4	.	.	.	41
3.00-3.49	8	12	6	.	.	.	26
3.50-3.99	14	6	.	.	.	20
4.00-4.49	3	9	2	.	.	14
4.50-4.99	1	.	.	1
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	110	768	1818	416	125	72	27	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 3137.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	141	418	90	11	25	1	.	.	.	.	660
0.50-0.99	.	441	1084	57	25	10	1	.	.	.	1618
1.00-1.49	.	.	253	162	9	1	.	.	.	.	435
1.50-1.99	.	.	13	133	12	8	1	1	.	.	167
2.00-2.49	.	.	.	41	12	13	4	.	.	.	70
2.50-2.99	.	.	.	1	54	14	.	1	.	.	56
3.00-3.49	16	7	.	.	.	.	30
3.50-3.99	1	.	.	.	.	7
4.00-4.49	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	141	859	1450	405	128	54	5	2	0	0	2860

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 2860.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	110	355	84	8	24	5	.	.	.	.	557
0.50-0.99	.	361	719	42	24	5	.	.	.	.	1151
1.00-1.49	.	.	210	48	10	9	.	.	.	.	277
1.50-1.99	.	.	12	87	2	3	.	1	.	.	105
2.00-2.49	.	.	.	29	10	.	.	.	.	.	39
2.50-2.99	18	.	.	.	.	.	18
3.00-3.49	10	9	.	.	.	.	19
3.50-3.99	4	.	.	.	.	4
4.00-4.49	3	.	.	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	110	716	1025	214	74	33	0	1	0	0	2043

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 2043.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	567	102	9	1	.	.	.	.	.	831
0.50-0.99	.	1004	761	62	19	5	.	.	.	.	1851
1.00-1.49	.	.	355	43	11	7	1	.	.	.	417
1.50-1.99	.	.	86	56	1	3	1	.	.	.	147
2.00-2.49	.	.	8	20	5	.	.	.	.	.	33
2.50-2.99	.	.	.	2	1	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	152	1571	1312	192	38	15	2	0	0	0	3078

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3078.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	233	981	99	20	1	1	.	.	.	.	1335
0.50-0.99	.	1815	558	55	26	4	.	.	.	.	2458
1.00-1.49	.	.	736	19	4	4	.	.	.	.	763
1.50-1.99	.	.	183	12	1	1	.	.	.	.	196
2.00-2.49	.	.	6	14	1	.	.	.	.	.	21
2.50-2.99	.	.	.	1	.	.	.	1	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	233	2796	1582	121	32	10	0	1	0	0	4474

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4474.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	381	1562	165	49	11						2168
0.50-0.99		4070	596	78	38	8					4790
1.00-1.49			2680	14	8	7	1				2710
1.50-1.99			1061	5	1						1067
2.00-2.49			26	85		1	1				113
2.50-2.99				17							17
3.00-3.49				2							2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	381	5632	4528	250	58	16	2	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) = 3.3		MEAN TP(SEC) = 3.5		NO. OF CASES = 10171.						

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) -202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	319	919	146	39	7	1	.	.	.	.	1431
0.50-0.99	.	3012	1116	86	36	8	.	.	.	.	4258
1.00-1.49	.	.	1189	6	4	4	.	.	.	.	1203
1.50-1.99	.	.	1150	168	.	.	.	.	.	.	1318
2.00-2.49	.	.	36	167	.	.	.	.	.	.	203
2.50-2.99	.	.	.	22	.	.	.	.	.	.	22
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	319	3931	3637	488	48	13	0	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M)=		3.4	MEAN TP(SEC)=		3.7	NO. OF CASES=		7898.		

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	264	652	119	39	9	1	.	.	.	.	1084
0.50-0.99	.	2013	630	94	33	10	.	.	.	.	2780
1.00-1.49	.	.	552	17	6	10	.	.	.	.	585
1.50-1.99	.	.	423	85	1	1	.	.	.	.	510
2.00-2.49	.	.	.	108	1	.	.	.	1	.	110
2.50-2.99	.	.	.	20	.	.	.	.	.	.	20
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	264	2665	1724	363	53	22	0	0	1	0	
MEAN HS(M) = 0.8	LARGEST HS(M) = 3.5		MEAN TP(SEC) = 3.6		NO. OF CASES = 4770.						

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	259	588	157	52	10	4					1070
0.50-0.99	.	1551	407	116	50	22	3	.	.	.	2149
1.00-1.49	.	.	457	16	23	18	2	.	.	.	516
1.50-1.99	.	.	251	33	3		3	.	.	.	292
2.00-2.49	.	.	3	28			1	.	.	.	32
2.50-2.99	.	.	.	8	.	.	.	.	.	.	8
3.00-3.49	.	.	.	1	1	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	259	2139	1275	254	87	46	9	0	0	0	
MEAN HS(M) = 0.7	LARGEST HS(M)=		3.3	MEAN TP(SEC)=		3.6	NO. OF CASES=		3814.		

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	390	924	345	104	26	1	5	.	.	.	1790
0.50-0.99	.	1569	511	348	149	65	5	.	.	.	2647
1.00-1.49	.	.	463	79	87	63	6	2	.	.	700
1.50-1.99	.	.	157	1	19	28	6	.	.	.	211
2.00-2.49	.	.	4	8	1	7	4	3	.	.	27
2.50-2.99	.	.	.	2	.	.	1	.	.	.	3
3.00-3.49	1	.	.	.	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	390	2493	1480	542	282	164	23	5	0	0	5040.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 5040.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	392	1271	289	72	11	3	.	.	.	.	2038
0.50-0.99	.	2017	827	296	103	38	.	.	.	.	3281
1.00-1.49	.	1	848	116	73	64	4	.	.	.	1106
1.50-1.99	.	.	317	73	25	28	6	1	.	.	450
2.00-2.49	.	.	24	62	13	5	9	.	.	.	113
2.50-2.99	.	.	.	11	13	2	1	1	.	.	28
3.00-3.49	8	22	.	.	.	.	30
3.50-3.99	7	.	.	.	.	7
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	392	3289	2305	630	246	169	20	2	0	0	6611.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6611.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	213	745	260	40	5	13	.	.	.	.	1263
0.50-0.99	.	1557	1732	370	68	17	.	.	.	.	3744
1.00-1.49	.	.	1219	480	124	55	9	.	.	.	1887
1.50-1.99	.	.	290	780	81	36	.	2	.	.	1196
2.00-2.49	.	.	6	449	159	34	19	2	.	.	669
2.50-2.99	.	.	.	31	357	10	5	.	.	.	403
3.00-3.49	64	163	3	1	.	.	231
3.50-3.99	1	84	2	.	.	.	87
4.00-4.49	20	4	.	.	.	24
4.50-4.99	3	.	.	.	4
5.00-5.49	1	2	1	.	3
5.50-5.99	3	.	.	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	213	2302	3507	2150	859	419	53	10	2	0	8911.

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 8911.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	101	373	113	8	2	1	.	.	.	.	598
0.50-0.99	.	471	1309	202	36	6	.	.	.	.	2024
1.00-1.49	.	.	744	516	97	37	.	.	.	.	1394
1.50-1.99	.	.	109	707	131	56	2	.	.	.	1005
2.00-2.49	.	.	.	489	158	67	10	.	.	.	726
2.50-2.99	.	.	1	22	501	49	27	4	.	.	603
3.00-3.49	129	347	11	5	.	.	492
3.50-3.99	2	232	12	7	.	.	253
4.00-4.49	66	73	.	.	.	150
4.50-4.99	5	32	11	.	.	71
5.00-5.49	6	33	1	.	38
5.50-5.99	6	11	.	17
6.00-6.49	8	1	9
6.50-6.99	9	.	9
7.00+	2	2
TOTAL	101	844	2276	1944	1057	866	173	90	37	3	6932.

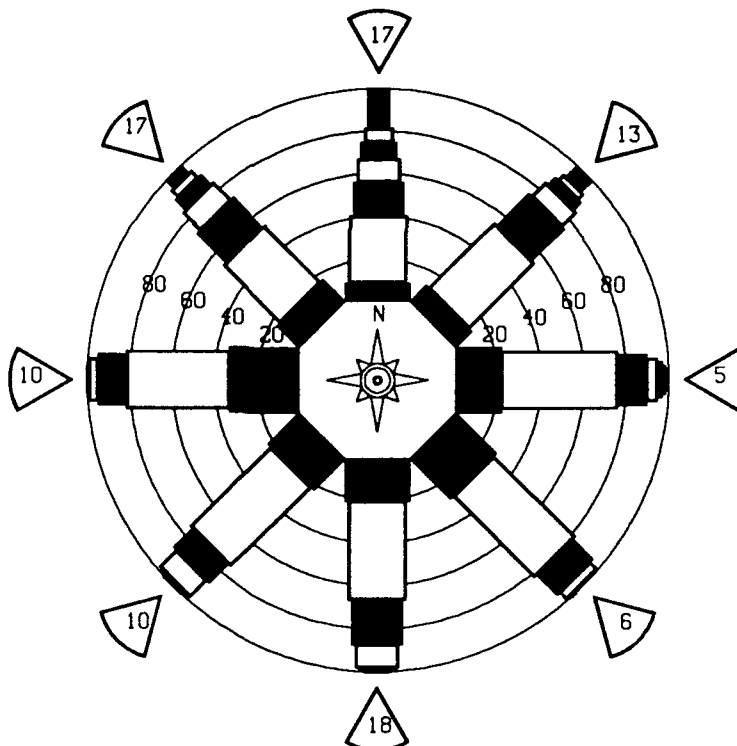
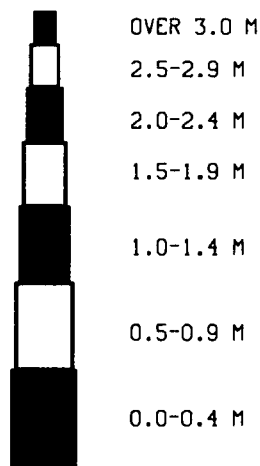
MEAN HS(M) = 1.6 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 5.3 NO. OF CASES= 6932.

STATION S47 46.65N 87.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	340	1148	232	49	9	1	.	.	.	.	1779
0.50-0.99	.	2206	1858	227	70	20	.	.	.	.	4381
1.00-1.49	.	.	1236	378	66	32	.	.	.	.	1714
1.50-1.99	.	.	431	399	85	26	.	.	.	.	943
2.00-2.49	.	.	11	246	85	37	.	.	.	.	384
2.50-2.99	.	.	.	16	205	28	.	1	.	.	255
3.00-3.49	38	150	.	1	.	.	193
3.50-3.99	103	.	1	.	.	115
4.00-4.49	22	11	4	.	.	177
4.50-4.99	1	26	.	.	.	51
5.00-5.49	2	24	.	.	32
5.50-5.99	29	.	.	18
6.00-6.49	11	.	.	10
6.50-6.99	8
7.00+	10
TOTAL	340	3354	3768	1315	558	420	108	72	30	5	

MEAN HS(M)= 1.1 LARGEST HS(M)= 11.1 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.

STATION 47
46.65N, 87.28 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S47 (46.65N 87.28W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.8	0.9	0.9	0.6	0.5	0.5	0.4	0.6	0.8	1.1	1.0	0.7
1957	1.7	1.6	1.4	1.1	1.2	1.1	1.0	1.0	1.3	1.2	1.3	1.6	1.3
1958	1.4	2.1	1.1	1.1	1.1	1.1	1.0	0.6	0.6	1.0	1.6	1.3	1.1
1959	0.8	0.8	0.7	0.6	0.7	0.4	0.4	0.4	0.6	0.8	1.0	1.2	0.7
1960	1.4	1.8	1.3	1.3	1.4	0.7	0.6	0.7	0.8	1.0	1.3	1.2	1.1
1961	1.0	1.1	1.4	0.9	0.9	0.8	0.6	0.7	1.0	1.3	1.1	1.1	1.0
1962	1.4	1.3	1.1	1.2	0.8	0.7	0.7	0.7	0.8	1.1	1.1	1.6	1.1
1963	1.3	1.6	1.7	1.2	0.9	0.8	0.8	0.9	0.9	1.0	1.6	1.6	1.1
1964	1.4	1.8	1.8	1.3	1.0	0.9	0.8	0.9	1.0	1.1	1.1	1.2	1.1
1965	1.5	1.6	1.6	1.0	0.8	0.8	0.8	0.8	0.8	1.4	1.4	1.6	1.1
1966	1.3	1.6	2.0	1.1	1.2	0.8	0.8	0.7	0.9	1.3	2.2	1.8	1.1
1967	1.9	1.9	1.4	1.2	1.1	0.7	0.7	1.0	1.0	1.3	1.1	1.2	1.1
1968	1.3	2.2	1.6	1.1	1.0	0.8	0.7	0.8	0.7	1.2	1.6	1.9	1.1
1969	1.6	1.4	2.2	1.4	1.1	0.8	0.7	0.8	1.1	1.4	1.1	1.1	1.1
1970	1.8	2.0	2.0	1.5	1.3	0.9	0.9	0.8	1.1	1.2	1.1	1.3	1.1
1971	0.9	1.0	1.1	0.8	0.6	0.4	0.4	0.4	0.5	0.8	1.1	0.8	0.7
1972	1.7	0.9	1.1	1.1	0.6	0.4	0.7	1.1	1.1	1.4	1.1	1.1	1.1
1973	1.3	1.0	1.1	1.1	1.1	0.7	0.6	0.6	0.8	1.1	1.1	1.1	1.1
1974	1.1	1.0	1.1	1.1	0.8	0.8	0.8	0.6	0.8	1.1	1.1	1.1	1.1
1975	1.4	1.0	1.1	1.1	0.7	0.8	0.7	0.8	0.8	1.1	1.1	1.1	1.1
1976	1.5	1.1	1.1	1.1	0.9	0.7	0.7	0.8	0.8	1.1	1.1	1.1	1.1
1977	1.4	1.1	1.1	1.1	0.7	0.7	0.7	0.8	0.8	1.1	1.1	1.1	1.1
1978	2.0	1.1	1.1	1.1	0.7	0.8	0.8	0.7	0.8	1.1	1.1	1.1	1.1
1979	1.7	1.3	1.1	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1980	1.2	1.1	1.3	1.1	0.8	0.7	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1982	1.8	1.1	1.6	1.1	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	2.2	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1984	1.3	1.1	2.2	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1985	1.5	1.1	2.0	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1986	1.6	1.0	1.6	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1987	1.3	1.1	1.4	1.0	0.7	0.5	0.6	0.6	0.7	1.1	1.1	1.3	1.0
MEAN	1.4	1.4	1.5	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.3	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S47 (46.65N 87.28W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.2	3.0	4.3	3.2	2.1	1.6	1.2	1.3	2.5	3.0	4.1	3.3	
1957	4.7	5.1	4.0	3.8	3.6	3.0	3.1	3.0	3.9	4.2	6.6	6.9	
1958	4.7	4.4	3.1	3.9	3.2	3.3	2.1	2.8	3.6	3.1	4.3	3.9	
1959	2.6	2.7	4.9	2.2	1.7	1.4	1.1	1.2	2.3	3.0	3.5	4.1	
1960	4.6	7.7	5.7	3.8	5.5	2.9	2.7	2.0	2.6	4.9	5.3	4.4	
1961	5.3	4.8	5.4	3.3	3.5	3.5	2.2	2.7	3.2	4.4	5.4	4.0	
1962	4.2	5.1	4.5	4.7	3.2	2.3	2.7	4.2	2.8	4.0	4.1	5.8	
1963	4.4	5.8	7.4	5.7	2.8	3.0	3.0	3.8	4.4	3.6	6.0	7.6	
1964	4.1	5.6	6.6	5.5	3.5	3.8	3.0	3.0	3.7	6.6	3.6	3.5	
1965	5.8	7.3	6.7	4.2	3.0	2.7	2.4	3.7	3.0	5.7	6.4	7.0	
1966	5.6	5.2	7.1	2.9	3.8	3.2	3.2	3.7	3.7	6.7	11.1	4.7	
1967	6.2	6.4	5.6	4.7	3.3	2.1	3.7	4.4	4.0	4.3	4.1	4.2	
1968	5.5	8.6	7.8	6.3	3.8	3.2	2.4	3.5	3.2	6.7	5.8	6.7	
1969	4.8	7.8	7.9	5.1	3.8	2.9	3.0	2.2	3.6	4.5	4.1	7.2	
1970	7.1	6.9	6.0	4.4	4.8	3.3	4.3	3.3	4.1	3.2	5.6	6.6	
1971	4.2	3.6	4.5	2.7	2.4	1.3	1.4	1.2	1.7	2.6	4.3	3.3	
1972	4.1	3.3	4.5	2.5	1.2	1.4	2.4	2.7	3.8	5.9	3.4	5.7	
1973	6.2	5.4	7.1	4.8	5.5	1.8	2.6	2.9	3.2	4.3	4.4	5.7	
1974	3.4	6.4	3.7	4.9	2.5	2.6	1.8	2.5	3.3	4.9	5.1	7.1	
1975	6.0	3.5	5.6	3.3	2.8	2.5	2.1	2.4	3.1	3.6	8.0	5.2	
1976	5.8	6.4	7.4	4.9	3.7	2.9	3.2	2.8	3.6	2.7	4.2	5.8	
1977	4.3	6.4	4.2	5.1	3.2	3.7	2.8	2.6	3.5	4.1	4.7	5.1	
1978	9.5	5.6	4.2	4.3	5.2	3.1	2.9	1.9	2.4	5.2	4.9	3.6	
1979	5.1	5.1	8.4	4.4	2.6	3.4	2.6	3.2	3.4	7.2	4.0	5.1	
1980	3.9	4.8	4.4	5.1	3.6	2.9	2.2	1.8	3.3	3.6	2.9	4.7	
1981	3.7	5.2	5.0	4.5	4.7	2.3	2.3	2.6	3.3	5.5	5.9	4.4	
1982	6.4	5.4	5.2	4.5	3.6	2.9	3.4	2.3	4.5	6.8	5.7	4.5	
1983	7.6	7.4	7.9	3.5	3.9	2.3	1.8	2.4	2.7	3.3	5.4	5.6	
1984	4.8	7.0	8.2	5.2	3.5	2.5	2.1	2.9	2.7	3.0	5.5	4.9	
1985	5.8	5.9	5.7	5.8	2.9	2.6	1.5	2.4	2.0	3.7	4.2	9.6	
1986	6.7	3.9	7.1	5.1	2.7	2.6	2.0	2.3	2.1	3.5	2.9	3.4	
1987	5.4	9.4	6.3	4.9	2.6	1.7	1.8	2.4	3.0	6.8	5.7	5.9	

32 YR. STATISTICS FOR WIS STATION S47

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	0.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.9
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	11.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	7.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	104	534	102	17	1						758
0.50-0.99		544	2070	175	19	5					2813
1.00-1.49			750	751	69	11					1581
1.50-1.99			120	727	232	51					1130
2.00-2.49				434	214	143	4				795
2.50-2.99				11	585	115	12	2			725
3.00-3.49					79	540	14	4			637
3.50-3.99						433	66	3			502
4.00-4.49						88	288	28	2		406
4.50-4.99						2	158	117	3		277
5.00-5.49						1	16	241			261
5.50-5.99								84	41		125
6.00-6.49								12	71		83
6.50-6.99									38	1	59
7.00+									33	48	101
TOTAL	104	1078	3042	2115	1199	1389	558	491	228	49	

MEAN HS(M) = 2.0 LARGEST HS(M)= 11.0 MEAN TP(SEC)= 5.7 NO. OF CASES= 9609.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	442	63	6	1						596
0.50-0.99		425	2031	116	17	2					2591
1.00-1.49			671	553	26	8					1258
1.50-1.99			42	420	162	11	1				636
2.00-2.49				177	122	43					342
2.50-2.99				4	206	54	2	1			267
3.00-3.49					18	160	2				180
3.50-3.99						102	13	1	1		117
4.00-4.49						8	65	3	1		78
4.50-4.99							23	23	1		47
5.00-5.49								31			31
5.50-5.99								7	5		12
6.00-6.49									9		9
6.50-6.99									8	1	9
7.00+									6	2	8
TOTAL	84	867	2807	1276	552	389	106	66	31	3	

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 5799.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	136	657	100	8							901
0.50-0.99		519	2804	95	26	1					3445
1.00-1.49			845	740	51	7					1643
1.50-1.99			51	533	144	13					741
2.00-2.49				208	116	54	3				381
2.50-2.99				1	223	45	1				270
3.00-3.49					11	177	5				193
3.50-3.99						137	21	1			159
4.00-4.49						16	79	7			102
4.50-4.99						1	21	36			58
5.00-5.49							1	33	1		35
5.50-5.99								8	6		14
6.00-6.49								2	4		6
6.50-6.99									5	3	4
7.00+									1	3	
TOTAL	136	1176	3800	1585	571	451	131	87	17	3	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 7458.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	111	410	84	3							608
0.50-0.99		330	1425	89	23	5					1872
1.00-1.49			312	143	24	5					484
1.50-1.99			9	81	23	10		1			124
2.00-2.49				36	19	13	2				70
2.50-2.99				2	6	10	3				28
3.00-3.49					1	8	6				20
3.50-3.99						9	12	1			23
4.00-4.49							3				3
4.50-4.99								1			1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	111	740	1830	354	109	60	26	4	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 3038.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	136	416	105	12	24	3	.	.	.	.	669
0.50-0.99	.	388	1083	77	11	11	1	.	.	.	1575
1.00-1.49	.	.	346	69	11	7	2	.	.	.	438
1.50-1.99	.	.	16	117	8	7	2	.	.	.	150
2.00-2.49	.	.	.	67	36	7	4	.	.	.	84
2.50-2.99	.	.	.	5	36	.	.	1	.	.	42
3.00-3.49	18	.	3	.	.	.	21
3.50-3.99	4	1	.	.	.	.	5
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	136	804	1550	347	107	29	10	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 2801.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	115	363	81	7	36	6	.	.	.	.	566
0.50-0.99	.	324	786	60	9	4	.	.	.	.	1212
1.00-1.49	.	.	285	22	9	4	.	.	.	.	320
1.50-1.99	.	.	12	83	2	3	.	.	.	.	98
2.00-2.49	.	.	.	55	23	.	.	.	.	.	57
2.50-2.99	.	.	.	5	6	.	.	.	.	.	28
3.00-3.49	3	.	.	.	.	6
3.50-3.99	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	115	687	1164	232	76	16	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2150.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	134	488	102	13	18	1	.	.	.	.	738
0.50-0.99	.	624	992	60	18	3	.	.	.	.	1697
1.00-1.49	.	.	529	10	11	5	1	.	.	.	556
1.50-1.99	.	.	54	102	2	1	1	.	.	.	160
2.00-2.49	.	.	.	51	7	.	.	.	.	.	51
2.50-2.99	.	.	.	8	7	.	.	.	.	.	15
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	134	1112	1677	244	39	10	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3019.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	196	906	84	10	1	7	1	.	.	.	1197
0.50-0.99	.	1511	777	55	23	7	1	.	.	.	2374
1.00-1.49	.	.	852	13	7	3	.	.	.	.	875
1.50-1.99	.	.	212	67	1	.	.	.	.	.	280
2.00-2.49	.	.	9	52	.	.	.	.	.	.	61
2.50-2.99	.	.	.	3	4	.	.	.	.	.	7
3.00-3.49	0
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	196	2417	1934	200	36	11	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 4493.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	336	1404	162	45	13						1960
0.50-0.99		3486	638	85	32	7					4248
1.00-1.49			2542	10	6	9					2567
1.50-1.99			967	1	2						970
2.00-2.49			29	78	1	1					108
2.50-2.99				21	1						22
3.00-3.49				2							2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	336	4890	4338	242	54	17	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 9245.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	299	876	122	34	6	1					1338
0.50-0.99		2608	875	84	33	7					3607
1.00-1.49			973	5	4	5					987
1.50-1.99			845	208							1053
2.00-2.49			4	214							218
2.50-2.99				25							25
3.00-3.49				2	3						5
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	299	3484	2819	572	46	13	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 6773.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	258	666	111	35	8	2					1080
0.50-0.99		2094	775	87	35	9	1				3001
1.00-1.49			770	9	10	11					800
1.50-1.99			685	110	1		1				797
2.00-2.49				131							131
2.50-2.99				21							21
3.00-3.49					3						3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	258	2760	2341	393	57	22	2	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5462.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	216	509	99	28	3	1					856
0.50-0.99		1618	605	83	39	10	1				2356
1.00-1.49			548	11	13	24	4				600
1.50-1.99			298	113	2	3					420
2.00-2.49			2	84				1			87
2.50-2.99				17	1						18
3.00-3.49				1	6						7
3.50-3.99					2						2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	216	2127	1552	337	66	38	9	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4073.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	263	470	176	33	4	3	.	.	.	.	949
0.50-0.99	.	1521	1174	211	116	34	3	.	.	.	3059
1.00-1.49	.	.	676	22	55	69	3	.	.	.	825
1.50-1.99	.	.	239	174	7	10	7	2	.	.	439
2.00-2.49	.	.	.	152	3	3	6	.	.	.	161
2.50-2.99	.	.	.	17	3	1	1	.	.	.	22
3.00-3.49	2	1	.	.	.	.	4
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	263	1991	2265	609	190	121	20	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 5118.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	271	638	166	47	3	.	.	.	.	.	1125
0.50-0.99	.	1690	2211	256	94	18	.	.	.	.	4269
1.00-1.49	.	1	1175	204	109	79	4	.	.	.	1572
1.50-1.99	.	.	356	466	42	37	7	.	.	.	908
2.00-2.49	.	.	1	356	43	14	16	.	.	.	430
2.50-2.99	.	.	.	55	74	2	4	1	.	.	136
3.00-3.49	29	34	.	.	.	.	63
3.50-3.99	1	17	1	.	.	.	19
4.00-4.49	7	1	.	.	.	8
4.50-4.99	3	.	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	271	2329	3909	1384	395	208	36	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 7992.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	146	559	174	27	1	.	.	.	.	.	907
0.50-0.99	.	839	2364	361	51	7	.	.	.	.	3622
1.00-1.49	.	.	1333	816	140	53	3	1	.	.	2346
1.50-1.99	.	.	175	874	162	77	12	1	.	.	1301
2.00-2.49	.	.	2	485	266	66	20	1	.	.	840
2.50-2.99	.	.	.	33	463	51	19	3	.	.	569
3.00-3.49	.	.	.	1	79	339	2	1	.	.	422
3.50-3.99	3	260	3	.	.	.	266
4.00-4.49	63	40	2	.	.	105
4.50-4.99	3	17	2	1	.	23
5.00-5.49	7	2	2	.	11
5.50-5.99	6	1	.	1
6.00-6.49	6
6.50-6.99	0
7.00+	0
TOTAL	146	1398	4048	2597	1165	919	123	19	4	0	

MEAN HS(M) = 1.4 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 9757.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	94	358	70	5	1	1	.	.	.	.	529
0.50-0.99	.	407	1355	183	32	7	.	.	.	.	1984
1.00-1.49	.	.	608	621	101	17	.	.	.	.	1347
1.50-1.99	.	.	82	571	192	66	2	.	.	.	913
2.00-2.49	.	.	.	319	192	98	14	.	.	.	625
2.50-2.99	.	.	.	13	403	72	26	4	.	.	518
3.00-3.49	49	395	19	10	.	.	473
3.50-3.99	1	283	33	5	1	.	323
4.00-4.49	68	101	17	.	.	186
4.50-4.99	63	57	2	.	122
5.00-5.49	7	55	11	.	73
5.50-5.99	12	20	.	32
6.00-6.49	2	17	1	20
6.50-6.99	12	.	12
7.00+	1	4	5
TOTAL	94	765	2117	1712	971	1007	265	162	64	5	

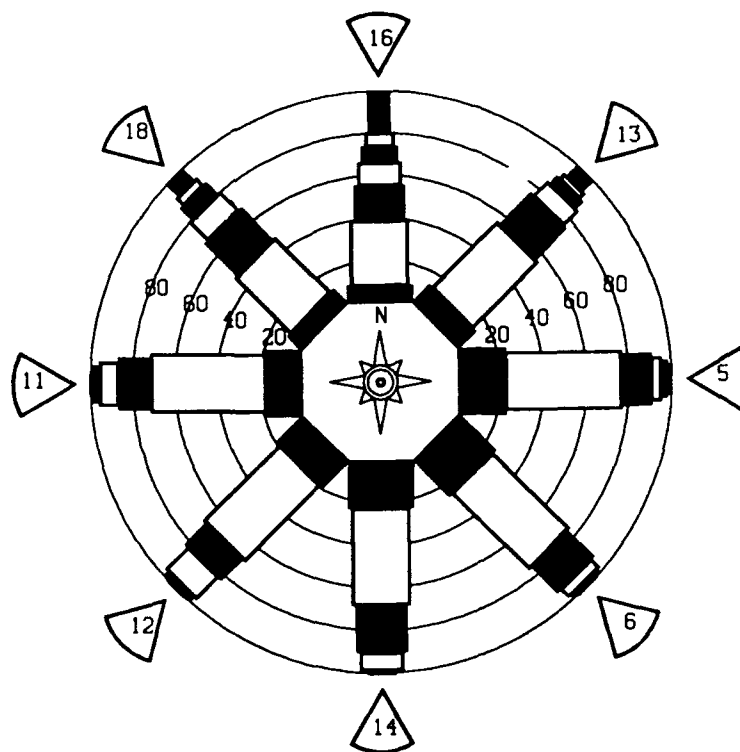
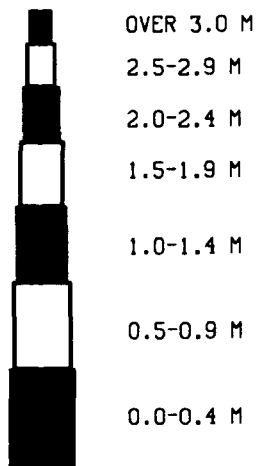
MEAN HS(M) = 1.7 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.5 NO. OF CASES= 6717.

STATION S48 46.65N 87.07W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	290	970	180	33	4	1	.	.	.	.	1477
0.50-0.99	.	1893	2197	208	62	13	.	.	.	.	4373
1.00-1.49	.	.	1322	400	65	32	1	.	.	.	1820
1.50-1.99	.	.	417	485	98	29	7	.	.	.	1012
2.00-2.49	.	.	5	290	98	44	7	.	.	.	444
2.50-2.99	.	.	.	24	204	35	1	1	.	.	271
3.00-3.49	31	16	5	1	.	.	202
3.50-3.99	1	12	5	1	.	.	142
4.00-4.49	25	28	5	.	.	87
4.50-4.99	3	23	.	.	51
5.00-5.49	36	1	.	40
5.50-5.99	11	7	.	18
6.00-6.49	2	10	.	12
6.50-6.99	8	.	8
7.00+	6	5	11
TOTAL	290	2863	4121	1420	563	468	126	80	32	5	

MEAN HS(M)= 1.1 LARGEST HS(M)= 11.0 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION 48
46.65N, 87.07 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S48 (46.65N 87.07W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.9	0.9	1.0	0.6	0.5	0.5	0.4	0.6	0.9	1.1	1.0	0.8
1957	1.9	1.7	1.4	1.2	1.2	1.0	1.0	1.1	1.3	1.3	1.4	1.8	1.4
1958	1.5	2.2	1.2	1.2	1.1	1.0	0.7	0.7	0.9	1.1	1.8	1.4	1.2
1959	0.9	0.9	0.8	0.6	0.7	0.4	0.4	0.4	0.6	0.8	1.1	1.2	0.7
1960	1.4	1.9	1.3	1.3	1.4	0.8	0.7	0.7	0.8	1.1	1.4	1.3	1.2
1961	1.1	1.1	1.5	1.0	1.0	0.9	0.6	0.7	1.1	1.3	1.3	1.2	1.1
1962	1.5	1.3	1.1	1.2	0.9	0.7	0.7	0.7	0.9	1.1	1.3	1.7	1.1
1963	1.4	1.7	1.8	1.2	1.0	0.9	0.8	0.9	1.0	1.0	1.7	1.7	1.2
1964	1.5	1.9	1.9	1.4	1.1	1.0	0.8	0.9	1.0	1.2	1.1	1.3	1.3
1965	1.7	1.7	1.7	1.0	0.8	0.8	0.8	0.8	0.8	1.5	1.5	1.6	1.2
1966	1.4	1.7	2.1	1.1	1.2	0.8	0.9	0.7	0.9	1.4	2.2	1.9	1.4
1967	1.9	2.0	1.4	1.2	1.1	0.8	0.8	1.0	1.0	1.4	1.3	1.3	1.3
1968	1.4	2.4	1.6	1.2	1.0	0.8	0.7	0.8	0.8	1.3	1.7	1.9	1.3
1969	1.7	1.5	2.0	1.4	1.1	0.8	0.8	0.8	1.1	1.4	1.3	1.7	1.3
1970	1.9	2.1	1.5	1.5	1.3	0.9	0.9	0.8	1.1	1.2	1.8	1.6	1.4
1971	1.1	1.1	1.2	0.8	0.6	0.4	0.5	0.5	0.6	0.8	1.0	1.0	0.8
1972	1.1	1.0	1.2	0.7	0.4	0.5	0.7	0.8	1.2	1.4	1.2	1.5	1.0
1973	1.4	1.6	1.9	1.6	1.4	0.7	1.0	0.9	1.1	2.2	1.6	1.6	1.3
1974	1.1	1.2	1.3	1.3	0.8	0.8	0.6	0.6	0.9	1.1	1.2	1.5	1.0
1975	1.5	1.0	1.5	1.2	0.8	0.8	0.7	0.7	0.9	1.1	1.7	1.4	1.1
1976	1.6	1.6	1.8	1.5	0.9	0.7	0.8	0.8	1.1	0.9	1.2	1.5	1.2
1977	1.5	1.6	1.2	1.0	0.7	1.0	0.8	0.8	1.0	2.2	1.3	1.4	1.1
1978	2.1	1.4	1.2	1.2	1.2	0.9	0.8	0.8	0.9	1.1	1.3	1.2	1.1
1979	1.8	1.3	1.7	0.9	0.9	0.9	0.8	0.8	1.1	1.6	1.5	1.5	1.2
1980	1.3	1.1	1.4	1.3	0.8	0.8	0.7	0.7	1.1	1.1	0.9	1.2	1.0
1981	1.0	1.3	1.5	1.2	1.1	0.7	0.6	0.5	1.0	1.2	1.5	1.3	1.1
1982	1.9	1.4	1.8	1.4	0.9	0.8	0.8	0.7	1.3	1.2	1.3	1.4	1.2
1983	1.7	1.5	2.3	1.2	1.2	0.8	0.7	0.8	0.8	1.0	1.7	1.6	1.3
1984	1.4	1.7	2.0	1.3	1.1	0.8	0.7	0.7	1.0	1.0	1.7	1.5	1.2
1985	1.6	1.6	1.7	1.2	0.6	0.7	0.6	0.7	0.8	0.9	1.2	1.5	1.1
1986	1.7	1.0	1.5	1.2	0.8	0.8	0.6	0.7	0.7	0.9	1.0	1.2	1.0
1987	1.4	1.1	1.4	1.1	0.7	0.5	0.6	0.7	0.7	1.2	1.2	1.4	1.0
MEAN	1.5	1.5	1.5	1.2	0.9	0.8	0.7	0.7	0.9	1.2	1.4	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S48 (46.65N 87.07W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.9	3.3	3.7	3.3	2.0	1.6	1.2	1.3	2.8	3.4	4.1	3.2	
1957	5.1	5.3	5.1	5.7	5.2	5.3	5.2	5.3	5.3	5.3	5.3	5.2	
1958	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1959	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	
1960	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1965	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1966	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1973	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1974	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1975	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1976	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1977	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1978	10.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1979	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1980	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1981	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1984	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1985	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S48

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.1
MEAN PEAK WAVE PERIOD	(SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	11.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	5.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		66112812

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	99	547	110	13	1	4	.	.	.	.	770
0.50-0.99	.	487	2027	191	23	.	.	.	.	.	2732
1.00-1.49	.	.	678	762	75	9	.	.	.	.	1524
1.50-1.99	.	.	97	685	247	44	1	.	.	.	1074
2.00-2.49	.	.	.	381	237	146	12	.	.	.	766
2.50-2.99	.	.	.	9	537	33	16	3	.	.	867
3.00-3.49	68	53	12	6	.	.	479
3.50-3.99	1	405	68	5	.	.	479
4.00-4.49	297	25	2	.	404
4.50-4.99	3	156	133	1	.	293
5.00-5.49	11	202	6	.	219
5.50-5.99	79	42	.	121
6.00-6.49	14	57	.	71
6.50-6.99	55	1	56
7.00+	48	44	92
TOTAL	99	1034	2912	2041	1189	1315	565	467	211	45	
MEAN HS (M) = 2.0	LARGEST HS (M) = 10.9		MEAN TP (SEC) = 5.7		NO. OF CASES = 9259.						

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	77	453	82	8	1						621
0.50-0.99		429	1989	126	17	2	.	.	.	.	2563
1.00-1.49	.	.	633	532	38	5	.	.	.	.	1208
1.50-1.99	.	.	38	411	135	13	1	.	.	.	598
2.00-2.49	.	.	.	187	128	34	.	1	.	.	349
2.50-2.99	.	.	.	3	205	34	2	.	.	.	245
3.00-3.49	.	.	.	.	24	160	1	.	.	.	165
3.50-3.99	.	.	.	.	.	98	16	1	.	.	115
4.00-4.49	.	.	.	.	.	11	47	2	.	.	60
4.50-4.99	.	.	.	.	.	1	17	11	.	.	29
5.00-5.49	.	.	.	.	.	.	2	18	.	.	20
5.50-5.99	.	.	.	.	.	.	.	9	.	.	12
6.00-6.49	.	.	.	.	.	.	.	.	7	.	7
6.50-6.99	.	.	.	.	.	.	.	.	3	.	3
7.00+	.	.	.	.	.	.	.	.	3	.	3
TOTAL	77	882	2742	1267	548	358	86	42	16	0	
MEAN HS(M) = 1.3	LARGEST HS(M)=		7.5	MEAN TP(SEC)=		4.8	NO. OF CASES=		5641.		

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	165	702	129	9	3						1008
0.50-0.99	.	567	2851	124	25	2	.	.	.	.	3569
1.00-1.49	.	.	865	628	57	7	.	.	.	.	1557
1.50-1.99	.	.	43	561	73	14	1	.	.	.	692
2.00-2.49	.	.	.	220	152	36	.	.	.	.	408
2.50-2.99	.	.	.	4	238	43	4	.	.	.	289
3.00-3.49	19	173	2	.	.	.	194
3.50-3.99	110	20	.	.	.	130
4.00-4.49	16	50	.	.	.	73
4.50-4.99	2	18	4	.	.	33
5.00-5.49	4	13	.	.	11
5.50-5.99	7	.	3	.	10
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	165	1269	3888	1546	567	403	102	32	4	0	
MEAN HS(M) = 1.2	LARGEST HS(M)=		6.1	MEAN TP(SEC)=		4.6	NO. OF CASES=		7475.		

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	124	423	106	6							659
0.50-0.99	.	375	1309	103	26	5	.	.	.	.	1818
1.00-1.49	.	.	276	111	29	4	.	.	.	.	420
1.50-1.99	.	.	16	70	17	11	1	.	.	.	115
2.00-2.49	.	.	.	36	10	17	2	.	.	.	65
2.50-2.99	.	.	.	2	18	11	3	.	.	.	34
3.00-3.49	2	18	10	1	.	.	31
3.50-3.99	12	.	.	.	.	13
4.00-4.49	3	.	.	.	0
4.50-4.99	0
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	124	798	1707	328	102	78	22	2	0	0	
MEAN HS (M) = 0.8	LARGEST HS (M) =		5.0	MEAN TP (SEC) =		4.1	NO. OF CASES =		2968.		

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	128	398	118	12	28	3	.	.	.	.	656
0.50-0.99	.	464	906	90	28	3	.	.	.	.	1491
1.00-1.49	.	.	337	40	18	11	.	.	.	.	407
1.50-1.99	.	.	37	64	6	12	3	.	.	.	122
2.00-2.49	.	.	.	19	2	7	4	1	.	.	53
2.50-2.99	1	5	.	.	.	31
3.00-3.49	7
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	128	862	1398	275	61	34	18	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 2609.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	106	362	88	11	.	.	.	.	.	.	567
0.50-0.99	.	548	602	75	40	4	.	.	.	.	1269
1.00-1.49	.	.	209	16	7	9	.	.	.	.	241
1.50-1.99	.	.	41	43	1	3	.	1	.	.	89
2.00-2.49	.	.	.	48	.	.	.	1	.	.	49
2.50-2.99	.	.	.	10	4	.	.	.	1	.	15
3.00-3.49	4	.	.	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	106	910	940	203	56	16	0	2	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 2099.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	136	493	103	12	.	.	.	.	.	.	744
0.50-0.99	.	1208	427	79	33	5	.	.	.	.	1752
1.00-1.49	.	.	221	8	20	9	2	.	.	.	260
1.50-1.99	.	.	77	6	2	1	.	.	.	.	86
2.00-2.49	.	.	.	7	.	.	1	1	.	.	9
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	136	1701	828	112	53	16	4	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2673.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	172	495	97	10	.	.	.	.	.	.	774
0.50-0.99	.	1265	760	67	25	7	1	.	.	.	2125
1.00-1.49	.	.	466	9	5	2	.	.	.	.	482
1.50-1.99	.	.	170	124	.	.	.	.	.	.	294
2.00-2.49	.	.	.	63	.	.	.	.	.	.	63
2.50-2.99	.	.	.	7	3	.	.	.	.	.	10
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	172	1760	1493	280	35	9	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3512.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	235	555	99	25	5	.	.	.	.	.	919
0.50-0.99	.	1881	2579	68	28	4	.	.	.	.	4560
1.00-1.49	.	.	2204	5	5	6	.	.	.	.	2220
1.50-1.99	.	.	838	1313	1	1	.	.	.	.	2153
2.00-2.49	.	.	1	812	32	.	.	.	.	.	813
2.50-2.99	.	.	.	140	47	.	.	.	.	.	172
3.00-3.49	12	.	.	.	.	.	47
3.50-3.99	1	.	.	.	.	12
4.00-4.49	1
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	2436	5721	2363	130	13	0	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 10198.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	222	726	97	23	4	1	.	.	.	.	1073
0.50-0.99	.	2688	1257	75	29	4	.	.	.	.	4053
1.00-1.49	.	.	1660	5	12	2	.	.	.	.	1679
1.50-1.99	.	.	1064	459	1	1	.	.	.	.	1524
2.00-2.49	.	.	3	452	.	.	.	.	.	.	455
2.50-2.99	.	.	.	57	5	.	.	.	.	.	62
3.00-3.49	.	.	.	2	22	.	.	.	.	.	24
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	222	3414	4081	1073	73	9	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 8306.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	186	589	82	21	5	.	.	.	.	.	883
0.50-0.99	.	1931	574	94	43	7	1	.	.	.	2650
1.00-1.49	.	.	845	9	17	7	2	.	.	.	880
1.50-1.99	.	.	545	116	.	.	1	.	.	.	662
2.00-2.49	.	.	.	118	.	.	.	.	.	.	118
2.50-2.99	.	.	.	17	.	.	.	.	.	.	17
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	186	2520	2046	375	68	14	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4882.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	160	463	86	22	1	.	.	.	.	.	732
0.50-0.99	.	1364	582	81	38	9	1	.	.	.	2075
1.00-1.49	.	.	546	14	20	11	4	.	.	.	595
1.50-1.99	.	.	255	101	1	3	3	.	.	.	363
2.00-2.49	.	.	3	89	1	.	.	.	.	.	93
2.50-2.99	.	.	.	12	16	.	.	.	.	.	28
3.00-3.49	.	.	.	1	11	.	.	.	.	.	12
3.50-3.99	4	.	.	.	.	4
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	160	1827	1472	320	88	29	8	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3662.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	185	580	130	34	2	2	.	.	.	.	933
0.50-0.99	.	1019	1466	196	84	25	.	.	.	.	2790
1.00-1.49	.	.	957	42	55	45	.	.	.	.	1100
1.50-1.99	.	.	118	320	5	22	3	.	.	.	468
2.00-2.49	.	.	2	265	2	6	6	2	.	.	283
2.50-2.99	.	.	.	20	51	.	.	.	.	.	71
3.00-3.49	20	.	.	.	.	.	20
3.50-3.99	3	.	.	.	.	3
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	185	1599	2673	877	219	105	10	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 5313.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	211	712	135	24	1	.	.	.	.	.	1083
0.50-0.99	.	1036	2515	289	64	7	.	.	.	.	3911
1.00-1.49	.	.	1738	385	120	66	3	.	.	.	2313
1.50-1.99	.	.	199	684	88	55	7	.	.	.	1033
2.00-2.49	.	.	.	542	77	14	12	3	.	.	648
2.50-2.99	.	.	.	77	227	19	7	1	.	.	331
3.00-3.49	57	67	.	1	.	.	125
3.50-3.99	1	68	2	.	.	.	71
4.00-4.49	13	12	.	.	.	25
4.50-4.99	2	10	1	.	.	13
5.00-5.49	1	.	.	.	1
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	211	1749	4587	2001	635	311	54	8	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 8953.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	112	556	152	23	4	.	.	.	.	.	847
0.50-0.99	.	612	2143	337	41	6	.	.	.	.	3139
1.00-1.49	.	.	1102	925	168	42	1	.	.	.	2238
1.50-1.99	.	.	130	810	220	78	10	.	.	.	1248
2.00-2.49	.	.	1	366	279	97	22	1	.	.	766
2.50-2.99	.	.	.	19	485	58	36	7	.	.	605
3.00-3.49	63	377	9	3	.	.	452
3.50-3.99	3	298	9	2	1	.	313
4.00-4.49	87	36	9	1	.	133
4.50-4.99	2	32	7	4	.	45
5.00-5.49	8	6	3	.	17
5.50-5.99	2	1	.	3
6.00-6.49	4	1	.	5
6.50-6.99	0
7.00+	0
TOTAL	112	1168	3528	2480	1263	1045	163	41	11	0	

MEAN HS(M) = 1.4 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 5.1 NO. OF CASES= 9194.

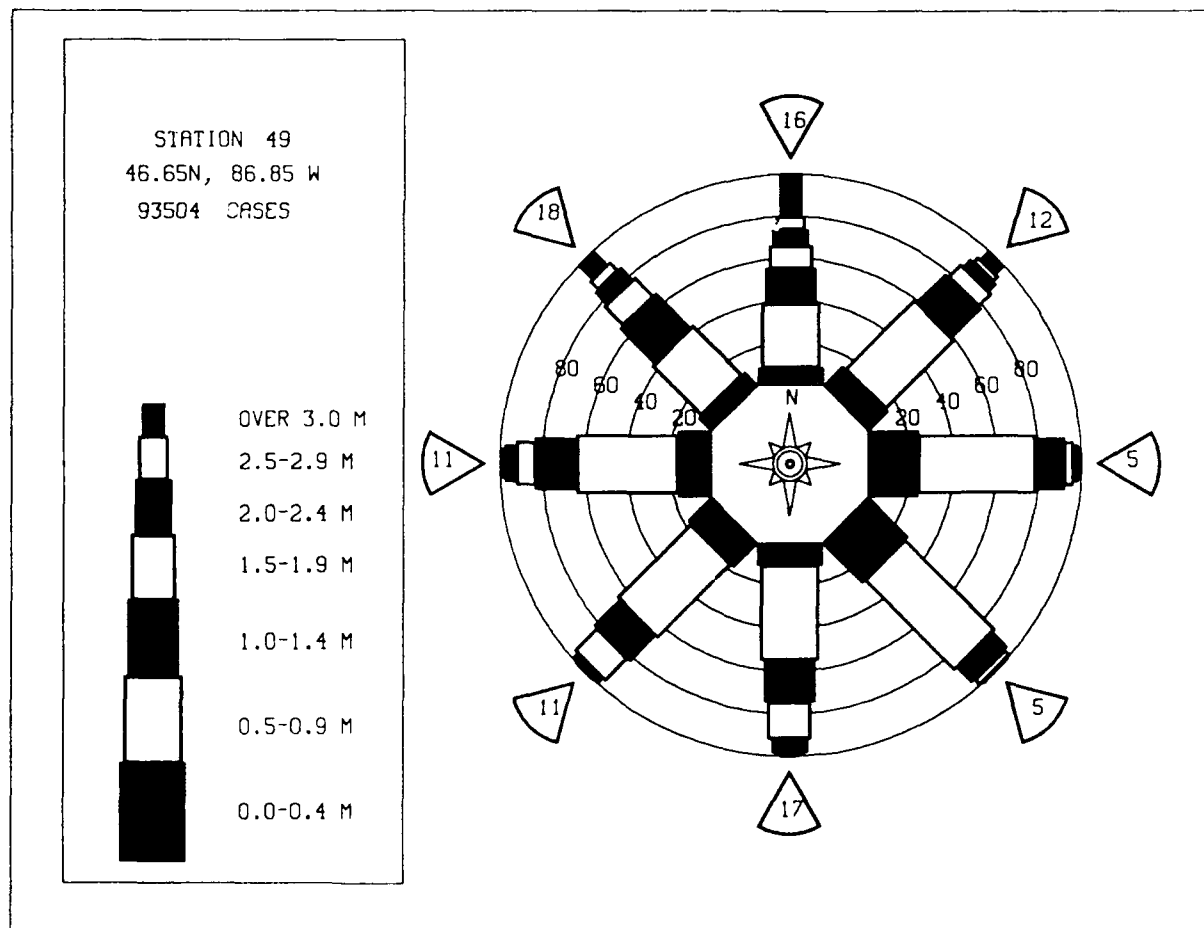
STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	78	309	70	13	2	.	.	.	.	.	472
0.50-0.99	.	420	1346	181	26	6	2	.	.	.	1981
1.00-1.49	.	.	533	719	115	17	.	.	.	.	1384
1.50-1.99	.	.	68	533	238	67	1	.	.	.	907
2.00-2.49	.	.	.	284	213	128	8	.	.	.	633
2.50-2.99	.	.	.	10	335	91	33	4	.	.	473
3.00-3.49	43	379	24	12	.	.	458
3.50-3.99	1	288	48	10	.	.	347
4.00-4.49	77	121	25	.	.	223
4.50-4.99	2	69	73	1	.	145
5.00-5.49	8	59	12	1	80
5.50-5.99	18	31	.	50
6.00-6.49	3	27	1	31
6.50-6.99	11	.	11
7.00+	2	6	8
TOTAL	78	729	2017	1740	973	1055	315	204	84	8	

MEAN HS(M) = 1.8 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.6 NO. OF CASES= 6760.

STATION S49 46.65N 86.85W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	240	836	169	27	3	10	.	.	.	.	1275
0.50-0.99	.	1630	2334	218	57	10	.	.	.	.	4249
1.00-1.49	.	.	1327	421	77	25	1	.	.	.	1851
1.50-1.99	.	.	374	630	103	33	3	.	.	.	1143
2.00-2.49	.	.	1	392	110	48	5	.	.	.	556
2.50-2.99	.	.	.	41	216	35	11	1	.	.	304
3.00-3.49	39	170	16	2	.	.	217
3.50-3.99	2	128	16	1	.	.	147
4.00-4.49	29	57	6	.	.	92
4.50-4.99	1	30	24	.	.	55
5.00-5.49	3	29	2	.	34
5.50-5.99	11	.	.	19
6.00-6.49	2	.	.	11
6.50-6.99	7
7.00+	10
TOTAL	240	2466	4205	1729	607	479	132	76	31	5	

MEAN HS(M)= 1.2 LARGEST HS(M)= 10.9 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S49 (46.65N 86.85W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.9	0.9	0.9	0.6	0.5	0.5	0.4	0.6	0.9	1.1	1.0	0.8
1957	2.0	1.1	1.5	1.2	1.2	1.1	1.0	1.1	1.4	1.3	1.1	1.1	1.4
1958	1.4	2.2	1.2	1.2	1.2	1.1	0.7	0.7	1.0	1.1	1.1	1.1	1.3
1959	0.9	0.9	0.8	0.7	0.7	0.5	0.4	0.4	0.7	0.8	1.1	1.1	0.8
1960	1.5	1.8	1.3	1.3	1.4	0.8	0.7	0.8	0.9	1.2	1.5	1.4	1.2
1961	1.2	1.2	1.6	1.0	0.9	0.9	0.6	0.7	1.1	1.4	1.3	1.3	1.1
1962	1.6	1.4	1.1	1.2	0.9	0.7	0.8	0.8	0.9	1.2	1.4	1.1	1.1
1963	1.5	1.7	1.8	1.3	1.0	0.9	0.8	0.9	1.0	1.1	1.7	1.7	1.3
1964	1.6	2.0	1.9	1.4	1.1	1.0	0.8	0.8	1.0	1.1	1.2	1.4	1.3
1965	1.7	1.8	1.6	1.1	0.9	0.9	0.9	0.9	0.9	1.6	2.3	1.7	1.3
1966	1.5	1.1	2.1	1.1	1.3	0.8	0.8	0.7	1.0	1.5	2.0	2.0	1.4
1967	2.0	2.0	1.5	1.3	1.1	0.8	0.8	1.0	1.1	1.5	1.4	1.5	1.3
1968	1.5	2.4	1.8	1.3	1.0	0.8	0.8	0.9	0.8	1.4	1.7	2.0	1.1
1969	1.8	2.6	2.0	1.4	1.2	0.9	0.8	0.9	1.1	1.5	1.4	1.8	1.1
1970	2.0	2.2	1.5	1.6	1.3	0.9	0.8	0.9	1.2	1.4	1.9	1.7	1.5
1971	1.2	1.1	1.2	0.9	0.6	0.4	0.5	0.5	0.6	0.9	1.1	1.0	0.8
1972	1.2	0.0	1.1	0.7	0.4	0.5	0.8	1.2	1.1	1.4	2.2	1.6	0.0
1973	1.5	1.6	1.9	1.6	1.1	0.7	1.0	1.0	1.1	1.3	1.6	1.7	1.1
1974	1.2	1.3	1.3	1.3	0.9	0.8	0.6	0.7	1.0	1.3	1.3	1.5	1.1
1975	1.6	1.1	1.6	1.2	0.8	0.9	0.8	0.7	0.9	1.3	1.8	1.5	1.1
1976	1.7	1.6	1.1	1.5	0.9	0.8	0.8	0.9	1.1	1.0	1.3	1.5	1.1
1977	1.6	1.7	1.3	1.1	0.9	1.0	0.8	0.8	1.0	1.3	1.4	1.4	1.1
1978	2.1	1.4	1.1	1.2	2.2	0.9	0.8	0.9	1.1	1.1	1.4	1.3	1.1
1979	1.8	1.4	1.8	0.9	0.0	1.0	0.8	0.8	1.2	1.6	1.6	1.6	1.3
1980	1.4	2.2	1.1	1.3	0.8	0.6	0.7	1.0	1.1	2.2	1.0	1.1	1.1
1981	1.1	3.3	1.5	1.2	0.0	0.8	0.6	0.5	1.0	1.3	1.5	1.3	1.1
1982	2.0	1.1	1.9	1.5	0.9	0.8	0.8	0.7	1.3	1.3	1.4	1.5	1.3
1983	1.8	6.6	2.2	1.2	0.9	0.9	0.7	0.8	0.9	1.1	1.7	1.7	1.1
1984	1.5	7.7	2.0	1.2	2.2	0.9	0.7	0.7	1.0	1.1	1.9	1.7	1.3
1985	1.6	1.7	1.7	1.2	0.7	0.7	0.6	0.7	0.9	1.0	3.3	1.5	1.1
1986	1.7	1.0	1.6	1.3	0.8	0.9	0.6	0.7	0.7	0.9	1.1	1.3	1.0
1987	1.5	1.2	1.4	1.1	0.7	0.5	0.6	0.7	0.7	1.2	1.2	1.5	1.0
MEAN	1.5	1.5	1.6	1.2	1.0	0.8	0.7	0.8	1.0	1.2	1.5	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S49 (46.65N 86.85W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.7	3.3	3.1	3.2	2.0	1.6	1.3	1.3	2.8	3.5	3.6	3.1	
1957	5.2	5.3	4.4	4.0	4.0	4.4	3.3	3.3	4.0	4.0	4.7	4.7	
1958	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1959	2.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1960	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1965	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1966	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1973	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1974	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1975	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1976	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1977	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1978	10.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1979	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1980	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1981	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1984	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1985	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S49

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.2
MEAN PEAK WAVE PERIOD	(SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	10.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	4.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		66112812

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	105	565	147	22	1	1	.	.	.	.	840
0.50-0.99	.	473	2044	195	23	3	.	.	.	.	2736
1.00-1.49	.	.	621	773	85	13	.	.	.	.	1482
1.50-1.99	.	.	94	658	243	38	2	.	.	.	1036
2.00-2.49	.	.	.	331	239	132	3	.	.	.	725
2.50-2.99	.	.	.	10	510	85	17	3	.	.	635
3.00-3.49	3	466	12	3	.	.	545
3.50-3.99	393	50	7	.	.	453
4.00-4.49	60	290	33	1	.	384
4.50-4.99	2	147	128	1	.	278
5.00-5.49	10	185	6	.	201
5.50-5.99	67	36	.	103
6.00-6.49	6	49	.	55
6.50-6.99	56	1	57
7.00+	34	37	71
TOTAL	105	1038	2906	1989	1168	1211	531	432	183	38	
MEAN HS(M) = 1.9	LARGEST HS(M) = 10.5		MEAN TP(SEC) = 5.6		NO. OF CASES = 8999.						

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	105	471	126	9	1						712
0.50-0.99		437	195	136	17	1					2541
1.00-1.49			553	510	51	4					1188
1.50-1.99			45	379	154	18	1				197
2.00-2.49				159	103	37					289
2.50-2.99				4	168	26	2	1			201
3.00-3.49					18	157	9				176
3.50-3.99						84					93
4.00-4.49						7					59
4.50-4.99							51	1			27
5.00-5.49							16	11			21
5.50-5.99							2	19			9
6.00-6.49								8			8
6.50-6.99								1			2
7.00+									7		4
TOTAL	105	908	2674	1197	512	334	82	41	13	1	5502

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	238	772	190	10							1210
0.50-0.99		680	2723	183	26	3	.	.	.	.	3615
1.00-1.49	.	.	868	529	57	5	.	.	.	.	1459
1.50-1.99	.	.	32	427	93	14	1	.	.	.	567
2.00-2.49	.	.	.	164	116	35	1	.	.	.	243
2.50-2.99	.	.	.	4	182	36	1	.	.	.	194
3.00-3.49	.	.	.	.	14	177	3	.	.	.	124
3.50-3.99	.	.	.	.	.	104	19	1	.	.	70
4.00-4.49	.	.	.	.	.	10	58	2	.	.	39
4.50-4.99	.	.	.	.	.	1	27	9	11	.	10
5.00-5.49	.	.	.	.	.	.	1	5	.	2	7
5.50-5.99	.	.	.	.	.	.	.	1	7	.	8
6.00-6.49	.	.	.	.	.	.	.	.	2	.	2
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	238	1452	3813	1317	488	405	111	29	11	0	7372.
MEAN HS(M) = 1.1	LARGEST HS(M)=		6.6	MEAN TP(SEC)=		4.5	NO. OF CASES=		7372.		

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	160	423	179	13							775
0.50-0.99		604	1053	124	34	5					1820
1.00-1.49			172	96	34	12					314
1.50-1.99			24	34	21	17					98
2.00-2.49			1	19	10	18					49
2.50-2.99				1	7	8		1			22
3.00-3.49					2	10					15
3.50-3.99						6					9
4.00-4.49											2
4.50-4.99								1			1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	160	1027	1429	287	108	76	16	2	0	0	2914
MEAN HS (M) = 0.7	LARGEST HS (M) = 4.7		MEAN TP (SEC) = 4.0		NO. OF CASES =		2914				

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	151	322	172	8							653
0.50-0.99		894	620	117	34	5					1670
1.00-1.49			166	32	32	16	3				249
1.50-1.99			50	12	2	20	2	1			87
2.00-2.49				28	2	6	8				44
2.50-2.99				3		3	7	1			14
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	151	1216	1008	200	70	50	20	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 2550.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	140	342	118	13							613
0.50-0.99		878	451	89	42	6					1466
1.00-1.49			164	16	7	8	1				196
1.50-1.99			71	28	3	2	1	1			106
2.00-2.49			1	33			2	1			37
2.50-2.99				4			1				5
3.00-3.49					2						2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	140	1220	805	183	54	16	5	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 2276.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	187	501	154	10	1						853
0.50-0.99		1358	412	80	41	5					1896
1.00-1.49			203	10	10	5	1				229
1.50-1.99			103	6			1				110
2.00-2.49			2	7							9
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	187	1859	874	114	52	10	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 2904.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	237	715	126	37	2	1					1118
0.50-0.99		1306	259	88	24	7	1				1685
1.00-1.49			328	5	4	2					339
1.50-1.99			104								104
2.00-2.49				9							9
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	237	2021	817	139	30	10	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3051.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	290	1093	209	48	10	1	.	.	.	.	1651
0.50-0.99	.	2022	250	93	39	3	.	.	.	.	2407
1.00-1.49	.	.	867	5	9	4	.	.	.	.	885
1.50-1.99	.	.	539	1	1	2	.	.	.	.	543
2.00-2.49	.	.	24	65	.	.	.	.	.	.	89
2.50-2.99	.	.	.	10	.	.	.	.	.	.	10
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	290	3115	1889	223	59	10	0	0	0	0	5230.
MEAN HS(M) = 0.8	LARGEST HS(M)=		3.2	MEAN TP(SEC)=		3.5	NO. OF CASES=		5230.		

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	284	1519	144	40	8	1	.	.	.	.	1996
0.50-0.99	.	3162	1781	85	20	4	.	.	.	.	5052
1.00-1.49	.	.	2998	62	11	2	.	.	.	.	3073
1.50-1.99	.	.	739	488	.	.	.	.	.	.	1227
2.00-2.49	.	.	21	674	.	.	.	.	.	.	695
2.50-2.99	.	.	.	94	143	.	.	.	.	.	237
3.00-3.49	.	.	.	1	60	.	.	.	.	.	61
3.50-3.99	2	8	.	.	.	.	10
4.00-4.49	3	.	.	.	.	3
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	284	4681	5683	1444	244	19	0	0	0	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=		4.5	MEAN TP(SEC)=		3.9	NO. OF CASES=		11563.		

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	232	866	104	21	4	1	.	.	.	.	1226
0.50-0.99	.	957	1488	93	32	7	.	.	.	.	2577
1.00-1.49	.	.	1275	19	17	1	2	.	.	.	1314
1.50-1.99	.	.	177	395	1	.	.	.	.	.	573
2.00-2.49	.	.	.	456	.	.	.	.	.	.	456
2.50-2.99	.	.	.	65	94	.	.	.	.	.	42
3.00-3.49	1	6	.	.	.	.	7
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	232	1823	3044	1049	191	19	2	0	0	0	5955
MEAN HS(M) = 1.0	LARGEST HS(M)=		4.6	MEAN TP(SEC)=		4.1	NO. OF CASES=		5955.		

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =247.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	177	587	79	25							866
0.50-0.99		679	1167	101	23	5					1977
1.00-1.49			826	31	25	8	2	1			893
1.50-1.99			106	270	3	8	2	1			390
2.00-2.49				217	4						222
2.50-2.99				33	34						67
3.00-3.49					18	4					22
3.50-3.99					2	7					9
4.00-4.49						4					4
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	177	1266	2178	677	109	36	5	2	0	0	4171
MEAN HS(M) = 0.9	LARGEST HS(M)=		4.8	MEAN TP(SEC)=		4.0	NO. OF CASES=		4171.		

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	179	654	113	19	4	2	.	.	.	.	971
0.50-0.99	.	626	1796	197	64	17	.	.	.	.	2700
1.00-1.49	.	.	982	157	58	39	3	.	.	.	1239
1.50-1.99	.	.	84	411	4	22	2	.	.	.	523
2.00-2.49	.	.	.	305	38	3	6	1	.	.	353
2.50-2.99	.	.	.	10	157	.	.	.	.	.	167
3.00-3.49	33	17	.	.	.	.	50
3.50-3.99	13	.	.	.	.	13
4.00-4.49	6	.	.	.	.	6
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	179	1280	2975	1099	358	119	13	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5646.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	201	774	151	19	3	.	.	.	.	.	1148
0.50-0.99	.	780	2769	290	58	6	.	.	.	.	3903
1.00-1.49	.	.	1444	628	154	49	2	.	.	.	2277
1.50-1.99	.	.	116	812	178	63	7	.	.	.	1146
2.00-2.49	.	.	.	423	178	38	11	2	.	.	650
2.50-2.99	.	.	.	10	406	24	10	4	.	.	454
3.00-3.49	113	117	1	1	.	.	232
3.50-3.99	2	86	5	4	.	.	97
4.00-4.49	25	21	6	2	.	54
4.50-4.99	16	5	1	.	22
5.00-5.49	2	4	.	.	6
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	201	1554	4480	2182	1060	408	75	28	3	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 9361.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	110	579	161	20	6	.	1	.	.	.	877
0.50-0.99	.	557	2235	350	35	8	.	.	.	.	3185
1.00-1.49	.	.	829	1073	188	39	3	.	.	.	2132
1.50-1.99	.	.	100	751	272	83	7	1	.	.	1214
2.00-2.49	.	.	.	287	284	157	17	1	.	.	746
2.50-2.99	.	.	.	6	443	99	40	8	.	.	596
3.00-3.49	73	328	17	14	.	.	432
3.50-3.99	265	64	9	.	.	338
4.00-4.49	97	60	59	.	.	216
4.50-4.99	2	32	52	5	.	91
5.00-5.49	11	18	10	.	39
5.50-5.99	1	6	.	7
6.00-6.49	2	3	1	6
6.50-6.99	2	.	.	2
7.00+	0
TOTAL	110	1136	3325	2487	1301	1078	252	167	24	1	

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.3 NO. OF CASES= 9261.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

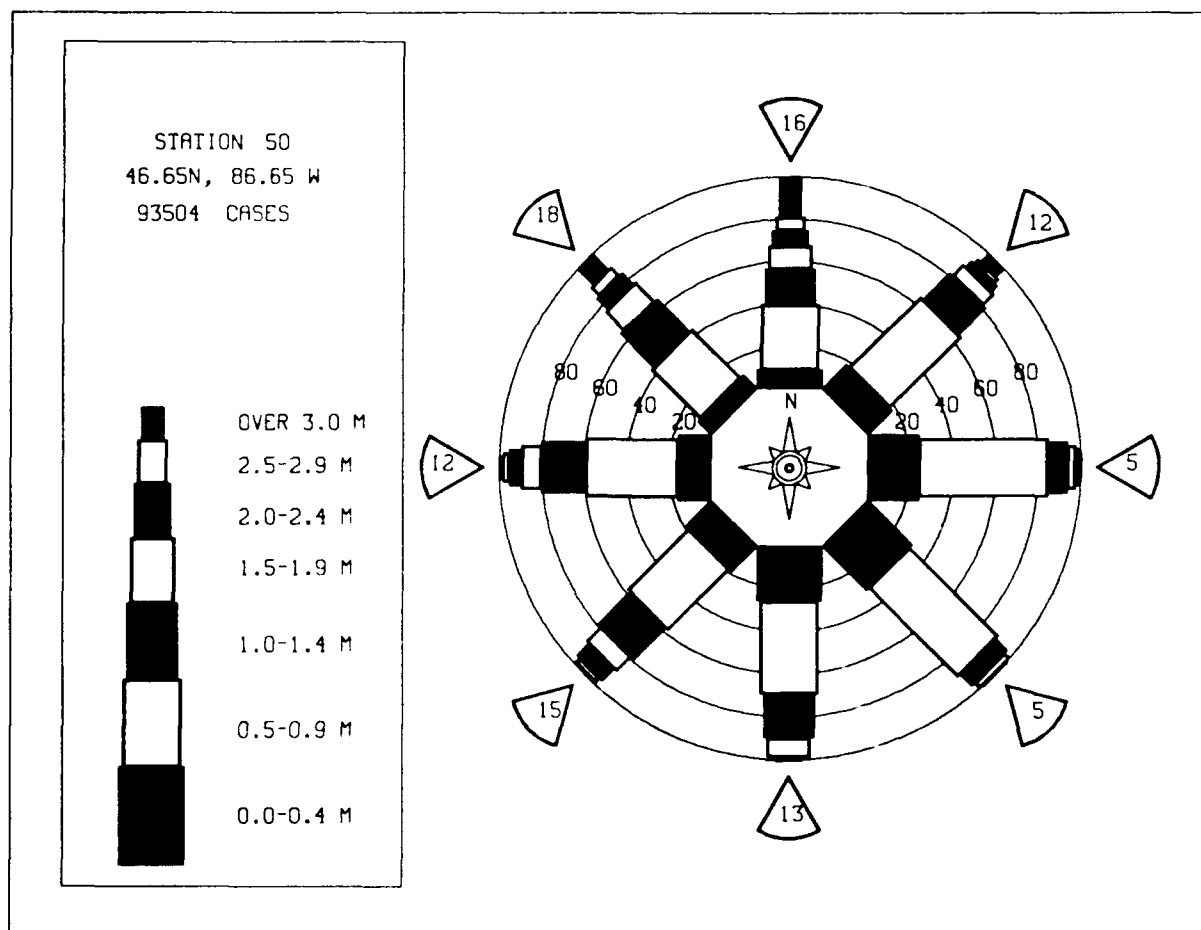
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	90	320	95	11	4	.	.	.	.	.	520
0.50-0.99	.	365	1310	195	18	5	1	.	.	.	1894
1.00-1.49	.	.	498	780	104	14	.	.	.	.	1396
1.50-1.99	.	.	64	532	276	67	1	.	.	.	940
2.00-2.49	.	.	.	262	166	177	5	.	.	.	610
2.50-2.99	.	.	.	6	332	98	34	2	.	.	472
3.00-3.49	39	349	28	14	1	.	431
3.50-3.99	249	74	13	.	.	336
4.00-4.49	45	151	35	.	.	231
4.50-4.99	53	102	2	.	157
5.00-5.49	8	74	17	.	99
5.50-5.99	12	37	1	50
6.00-6.49	3	29	.	32
6.50-6.99	14	1	15
7.00+	1	6	7
TOTAL	90	685	1967	1786	939	1004	355	255	101	8	

MEAN HS(M) = 1.8 LARGEST HS(M)= 8.5 MEAN TP(SEC)= 5.6 NO. OF CASES= 6749.

STATION S50 46.65N 86.65W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	289	1051	227	33	4	.	.	.	.	.	1604
0.50-0.99	.	1578	2231	242	53	9	.	.	.	.	4113
1.00-1.49	.	.	1280	473	85	21	1	.	.	.	1860
1.50-1.99	.	.	245	521	122	35	3	.	.	.	926
2.00-2.49	.	.	5	344	114	62	5	.	.	.	530
2.50-2.99	.	.	.	26	248	41	11	2	.	.	328
3.00-3.49	48	162	6	3	.	.	219
3.50-3.99	1	122	22	3	.	.	148
4.00-4.49	26	63	13	.	.	102
4.50-4.99	29	31	.	.	60
5.00-5.49	3	31	3	.	37
5.50-5.99	9	8	.	17
6.00-6.49	1	9	.	10
6.50-6.99	7	.	7
7.00+	3	4	7
TOTAL	289	2629	3988	1639	675	478	143	93	30	4	

MEAN HS(M)= 1.2 LARGEST HS(M)= 10.5 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S50 (46.65N 86.65W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.9	0.9	0.9	0.6	0.5	0.5	0.4	0.6	0.8	1.1	1.0	0.7
1957	2.1	1.8	1.4	1.2	1.2	1.0	1.0	1.1	1.4	1.3	1.6	1.1	1.4
1958	1.4	2.2	1.1	1.1	1.1	1.0	0.7	0.7	0.9	1.1	1.6	1.1	1.2
1959	1.0	0.9	0.8	0.7	0.7	0.5	0.4	0.4	0.7	0.8	1.2	1.2	0.8
1960	1.5	1.8	1.3	1.3	1.3	0.7	0.7	0.7	0.8	1.2	1.6	1.4	1.2
1961	1.2	1.1	1.5	1.0	0.9	0.8	0.6	0.7	1.1	1.4	1.4	1.3	1.1
1962	1.7	1.3	1.0	1.2	0.8	0.6	0.7	0.7	0.9	1.1	1.3	1.1	1.1
1963	1.5	1.7	1.7	1.2	0.9	0.8	0.8	0.9	1.0	1.1	1.8	1.7	1.3
1964	1.7	2.1	1.9	1.4	1.1	1.0	0.7	1.0	1.1	1.3	1.2	1.4	1.3
1965	1.8	1.9	1.6	1.0	0.8	0.8	0.8	0.8	0.9	1.6	1.6	1.8	1.3
1966	1.5	1.8	2.1	1.1	1.3	0.8	0.9	0.7	1.0	1.5	2.3	2.0	1.4
1967	2.0	2.1	1.5	1.2	1.1	0.7	0.8	1.0	1.1	1.4	1.4	1.4	1.3
1968	1.4	2.5	1.7	1.2	1.0	0.8	0.8	0.8	0.8	1.3	1.7	1.9	1.3
1969	1.8	1.5	2.0	1.4	1.1	0.8	0.7	0.9	1.1	1.5	1.4	1.1	1.3
1970	2.0	2.3	1.5	1.5	1.3	0.9	0.9	0.9	1.1	1.2	1.8	1.6	1.4
1971	1.2	1.1	1.3	0.9	0.7	0.4	0.5	0.5	0.6	0.8	1.1	1.1	0.9
1972	1.3	1.1	1.2	0.7	0.4	0.5	0.7	0.7	1.2	1.5	2.2	1.5	1.0
1973	1.5	1.5	1.8	1.5	1.2	0.6	0.9	0.9	1.1	1.2	1.6	1.7	1.3
1974	1.2	1.2	1.3	1.3	0.8	0.7	0.6	0.6	1.0	1.3	1.3	1.1	1.1
1975	1.6	1.1	1.5	1.1	0.7	0.8	0.7	0.7	0.9	1.2	1.7	1.5	1.1
1976	1.7	1.7	1.8	1.5	0.9	0.7	0.7	0.8	1.1	0.9	1.4	1.1	1.2
1977	1.6	1.7	1.2	1.0	0.7	1.0	0.8	0.8	0.9	1.3	1.4	1.1	1.1
1978	2.2	1.4	1.2	1.1	1.1	0.8	0.8	0.8	0.9	1.3	1.4	1.3	1.2
1979	1.8	1.3	1.6	0.9	0.8	0.9	0.7	0.9	1.2	1.5	1.6	1.1	1.1
1980	1.4	1.2	1.4	1.2	0.8	0.8	0.8	0.7	1.0	1.2	0.9	1.3	1.0
1981	1.1	1.3	1.5	1.2	1.0	0.7	0.6	0.5	1.0	1.2	1.1	1.1	1.1
1982	2.0	1.4	1.8	1.4	0.8	0.8	0.8	0.7	1.3	1.2	1.9	1.4	1.2
1983	1.7	1.5	2.2	1.1	1.1	0.8	0.7	0.7	0.8	1.1	1.1	1.1	1.0
1984	1.5	1.7	1.9	1.2	1.0	0.8	0.6	0.7	1.0	1.1	1.6	1.7	1.1
1985	1.7	1.7	1.7	1.1	0.6	0.7	0.5	0.7	0.9	1.0	1.3	1.6	1.1
1986	1.8	1.0	1.6	1.2	0.7	0.8	0.5	0.6	0.7	0.9	1.2	1.3	1.0
1987	1.4	1.1	1.4	1.0	0.7	0.4	0.6	0.6	0.7	1.2	1.2	1.4	1.0
MEAN	1.6	1.5	1.5	1.2	0.9	0.8	0.7	0.7	1.0	1.2	1.5	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S50 (46.65N 86.65W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.8	3.5	2.9	3.4	2.0	1.6	1.3	1.4	2.8	3.6	3.6	3.2	
1957	2.1	5.7	4.4	4.0	3.3	3.3	3.7	3.4	4.1	3.8	6.8	5.7	
1958	2.5	4.7	3.7	4.0	3.3	3.6	3.5	3.4	4.3	3.9	4.4	3.9	
1959	2.9	3.1	4.7	2.6	2.7	1.7	1.3	2.4	3.2	3.8	5.4	4.6	
1960	4.2	7.2	5.0	3.7	3.0	3.0	2.7	2.7	3.2	3.6	5.5	4.1	
1961	6.5	4.5	5.1	4.3	3.4	3.4	3.3	2.7	3.4	4.5	5.5	3.3	
1962	4.4	5.2	4.3	4.5	3.2	3.2	3.8	2.7	2.7	3.1	3.9	6.0	
1963	4.2	5.5	7.1	4.7	3.3	3.0	3.6	3.3	4.2	3.3	5.3	7.2	
1964	5.1	5.8	6.1	3.2	3.7	3.8	3.9	3.1	3.3	3.7	4.4	3.3	
1965	5.6	6.4	6.1	3.9	2.8	3.7	3.4	3.6	3.0	5.7	5.9	7.7	
1966	5.0	4.8	6.6	3.3	4.3	3.3	3.5	3.1	3.8	6.0	10.5	5.0	
1967	6.0	6.1	5.4	4.7	3.6	3.6	3.7	3.7	4.2	4.2	4.5	3.3	
1968	5.7	8.3	7.4	3.5	3.5	3.5	3.5	3.4	3.1	6.1	6.1	6.1	
1969	5.2	7.2	7.5	4.8	3.6	3.6	3.1	3.1	3.3	4.8	4.7	6.6	
1970	6.8	6.4	5.4	4.3	4.7	3.3	3.3	3.3	4.2	4.1	5.7	6.6	
1971	5.4	4.5	4.5	3.1	1.9	1.2	1.8	1.5	2.2	2.9	4.7	4.3	
1972	5.0	4.7	4.5	2.8	1.7	1.7	2.4	2.2	4.3	6.7	4.0	6.3	
1973	6.0	4.9	7.3	4.5	5.2	1.8	3.6	3.3	3.9	4.6	4.6	5.5	
1974	4.3	6.6	4.3	4.6	2.4	2.3	3.3	3.3	3.6	4.9	5.2	7.0	
1975	5.9	3.8	5.1	3.0	2.4	2.8	2.4	2.7	3.1	4.2	7.3	5.6	
1976	6.1	6.4	6.7	4.6	3.5	2.9	2.6	3.0	3.7	3.1	4.1	6.0	
1977	4.7	5.8	4.4	5.1	3.3	3.3	3.6	2.9	4.3	4.0	6.3	7.7	
1978	10.1	5.5	4.7	5.1	5.1	3.0	3.9	2.5	2.8	4.9	4.7	4.0	
1979	4.8	4.8	8.5	4.3	3.3	3.4	2.7	3.5	3.3	6.3	3.9	5.2	
1980	4.2	4.5	4.6	5.0	3.3	3.0	2.1	2.1	3.6	5.1	3.8	4.6	
1981	4.1	5.2	4.7	4.1	4.5	2.7	1.8	2.3	4.0	4.8	5.7	4.4	
1982	6.6	5.2	5.8	6.2	3.3	2.6	3.5	2.3	4.3	5.8	5.6	4.7	
1983	7.1	7.1	8.0	3.1	3.7	3.3	3.3	2.7	3.0	4.2	5.0	5.3	
1984	4.6	7.0	7.6	5.2	3.5	3.0	2.4	2.8	2.5	3.6	5.0	4.6	
1985	6.0	6.1	5.5	5.9	2.9	3.6	1.6	2.5	2.6	3.6	4.1	5.2	
1986	7.3	4.3	7.3	5.1	3.2	2.8	1.9	2.5	2.6	4.2	3.9	3.7	
1987	5.5	8.8	6.2	4.4	2.5	1.8	2.0	2.4	3.1	6.8	5.4	5.7	

32 YR. STATISTICS FOR WIS STATION S50

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.2
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS (METERS)	1.0
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	10.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	3.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	137	620	196	20	2						975
0.50-0.99		532	2123	287	26	3					2971
1.00-1.49			662	814	89	4					1569
1.50-1.99			90	654	294	49	1				1088
2.00-2.49				339	210	157	5				711
2.50-2.99				12	453	98	17				584
3.00-3.49					49	433	8	4			493
3.50-3.99						339	63	8			410
4.00-4.49						48	251	38	1		338
4.50-4.99							130	102	3		238
5.00-5.49								128	6		139
5.50-5.99								5	36		92
6.00-6.49								1	45		51
6.50-6.99									52	1	54
7.00+									13	24	37
TOTAL	137	1152	3071	2126	1123	1132	481	345	156	25	
MEAN HS(M) = 1.7	LARGEST HS(M) = 10.1		MEAN TP(SEC) = 5.5		NO. OF CASES = 9136.						

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	131	549	216	17	1						914
0.50-0.99		518	1916	199	18	1					2652
1.00-1.49			543	522	91	3					1159
1.50-1.99			23	342	131	22	1				519
2.00-2.49				125	84	29					238
2.50-2.99					151	24	2	1			178
3.00-3.49					17	103					120
3.50-3.99						74	10				84
4.00-4.49						10	28	2			40
4.50-4.99							16				24
5.00-5.49							3	8			11
5.50-5.99								9	1		10
6.00-6.49									4		4
6.50-6.99								1	1		2
7.00+									1		1
TOTAL	131	1067	2698	1205	493	266	60	29	7	0	
MEAN HS(M) = 1.1	LARGEST HS(M)= 7.1		MEAN TP(SEC)= 4.6		NO. OF CASES= 5586.						

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	313	839	328	18	1	.	.	.	.	.	1499
0.50-0.99	.	836	2127	268	27	4	.	.	.	.	3262
1.00-1.49	.	.	609	342	50	8	1	.	.	.	1010
1.50-1.99	.	.	24	322	74	13	1	.	.	.	434
2.00-2.49	.	.	2	120	81	25	.	.	.	.	228
2.50-2.99	.	.	.	4	181	48	3	.	.	.	236
3.00-3.49	14	142	2	.	.	.	158
3.50-3.99	75	28	.	.	.	103
4.00-4.49	6	45	4	.	.	59
4.50-4.99	8	7	.	.	15
5.00-5.49	1	7	.	.	8
5.50-5.99	10	.	.	10
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	313	1675	3090	1074	428	321	89	29	1	0	
MEAN HS(M) = 1.0	LARGEST HS(M) = 6.0		MEAN TP(SEC) = 4.4		NO. OF CASES = 6582.						

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	211	562	305	19	4						1101
0.50-0.99		557	576	152	48	5	.	.	.	.	1338
1.00-1.49	.	.	79	67	27	20	.	.	.	.	193
1.50-1.99	.	.	6	24	19	14	1	.	.	.	64
2.00-2.49	.	.	1	5	3	11	5	1	.	.	26
2.50-2.99	.	.	.	2	4	3	.	.	.	.	9
3.00-3.49	.	.	.	.	.	7	.	.	.	.	7
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	1	.	.	.	1
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	211	1119	967	269	105	60	7	1	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)=		4.1	MEAN TP(SEC)=		3.9	NO. OF CASES=		2572.		

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	209	690	389	31	3						1322
0.50-0.99		574	336	171	52	12					1145
1.00-1.49			89	29	36	34	2				170
1.50-1.99			20	2	1	25	19				67
2.00-2.49					1	4	5	1			11
2.50-2.99							1				1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	209	1264	814	233	93	75	27	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2548.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	198	564	203	39	7						1011
0.50-0.99		777	242	105	49	17					1190
1.00-1.49			102	13	7	13	6				141
1.50-1.99			54			10	7	2			73
2.00-2.49			3				1				4
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	198	1341	604	157	63	40	14	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 2272.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	221	551	192	22	2						988
0.50-0.99		1251	352	93	33		1				1737
1.00-1.49			155	2	8	3					168
1.50-1.99			68								74
2.00-2.49			1	2							3
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	221	1802	768	125	43	10	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 2783.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	244	735	185	38	6	2					1210
0.50-0.99		1284	345	80	13	4					1726
1.00-1.49			321	6	5	2	1				335
1.50-1.99			118	5							123
2.00-2.49			1	6							7
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	244	2019	970	136	24	8	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3189.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	436	1157	271	47	9	1	.	.	.	.	1921
0.50-0.99	.	2098	337	115	21	4	.	.	.	.	2575
1.00-1.49	.	.	1519	6	.	1	.	.	.	.	1530
1.50-1.99	.	.	459	.	.	.	.	.	.	.	460
2.00-2.49	.	.	10	53	.	1	.	.	.	.	63
2.50-2.99	.	.	.	5	.	.	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	436	3255	2596	226	34	7	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 6136.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	374	1483	197	43	12	.	.	.	.	.	2109
0.50-0.99	.	3163	448	100	22	3	.	.	.	.	3736
1.00-1.49	.	.	1301	16	12	2	.	.	.	.	1331
1.50-1.99	.	.	434	32	.	.	.	.	.	.	466
2.00-2.49	.	.	9	132	.	.	.	.	.	.	141
2.50-2.99	.	.	.	20	.	.	.	.	.	.	20
3.00-3.49	.	.	.	3	1	.	.	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	374	4646	2389	346	47	5	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7308.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	241	1184	155	22	2	.	.	.	.	.	1604
0.50-0.99	.	1740	1758	119	23	6	.	.	.	.	3646
1.00-1.49	.	.	905	422	12	6	1	.	.	.	1346
1.50-1.99	.	.	671	360	4	.	.	.	.	.	1035
2.00-2.49	.	.	25	134	44	.	.	.	.	.	203
2.50-2.99	.	.	.	18	12	1	.	.	.	.	31
3.00-3.49	.	.	.	2	.	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	241	2924	3514	1077	97	13	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 7367.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	160	805	105	13	1	.	.	.	.	.	1084
0.50-0.99	.	940	1450	102	22	4	.	.	.	.	2518
1.00-1.49	.	.	790	208	20	11	1	.	.	.	1030
1.50-1.99	.	.	93	434	1	.	.	.	.	.	536
2.00-2.49	.	.	6	222	50	1	3	.	.	.	279
2.50-2.99	.	.	.	8	55	.	.	.	.	.	64
3.00-3.49	6	11	.	.	.	.	17
3.50-3.99	6	.	.	.	.	6
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	160	1745	2444	987	155	39	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 5185.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	189	819	133	12	2						1155
0.50-0.99	.	817	1982	194	45	11	.	.	.	.	3049
1.00-1.49	.	.	983	425	63	36	.	.	.	.	1510
1.50-1.99	.	.	99	480	36	29	.	2	.	.	646
2.00-2.49	.	.	.	256	72	3	4	2	.	.	337
2.50-2.99	.	.	.	17	163	1	.	.	.	.	181
3.00-3.49	32	52	.	.	.	.	84
3.50-3.99	25	.	.	.	.	25
4.00-4.49	10	3	.	.	.	13
4.50-4.99	1	4	.	.	.	5
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	189	1636	3197	1384	413	168	17	2	0	0	
MEAN HS (M) = 1.0	LARGEST HS (M) = 5.2		MEAN TP (SEC) = 4.4		NO. OF CASES = 6565.						

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	197	893	209	18	1						1318
0.50-0.99	.	814	2893	309	48	3	.	.	.	.	4067
1.00-1.49	.	.	1134	1050	188	28	.	.	.	.	2400
1.50-1.99	.	.	114	801	222	79	4	.	.	.	1220
2.00-2.49	.	.	.	329	188	70	7	2	.	.	596
2.50-2.99	.	.	.	6	392	44	12	5	.	.	459
3.00-3.49	55	217	5	.	.	.	277
3.50-3.99	115	6	.	.	.	121
4.00-4.49	19	35	1	.	.	55
4.50-4.99	1	14	7	.	.	22
5.00-5.49	2	8	1	.	11
5.50-5.99	3	1	.	4
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	197	1707	4350	2513	1094	576	85	26	2	0	
MEAN HS(M) = 1.2	LARGEST HS(M)=		5.8	MEAN TP(SEC)=		4.8	NO. OF CASES=		9881.		

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	134	626	240	34	4		1				1039
0.50-0.99		592	2368	368	59	13	1				3401
1.00-1.49			722	1143	181	53	3				2102
1.50-1.99			84	579	443	109	11				1226
2.00-2.49				228	191	249	25	2			695
2.50-2.99				8	332	110	56	19			525
3.00-3.49					36	310	41	18			405
3.50-3.99					1	190	71	20			283
4.00-4.49						9	147	56	3		215
4.50-4.99						1	20	104	18		131
5.00-5.49								73	24	1	92
5.50-5.99								9	3		33
6.00-6.49									3	1	8
6.50-6.99									1	2	5
7.00+									1	3	4
TOTAL	134	1218	3414	2360	1247	1044	376	301	63	7	
MEAN HS(M) = 1.5	LARGEST HS(M)= 7.9		MEAN TP(SEC)= 5.3		NO. OF CASES= 9529.						

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

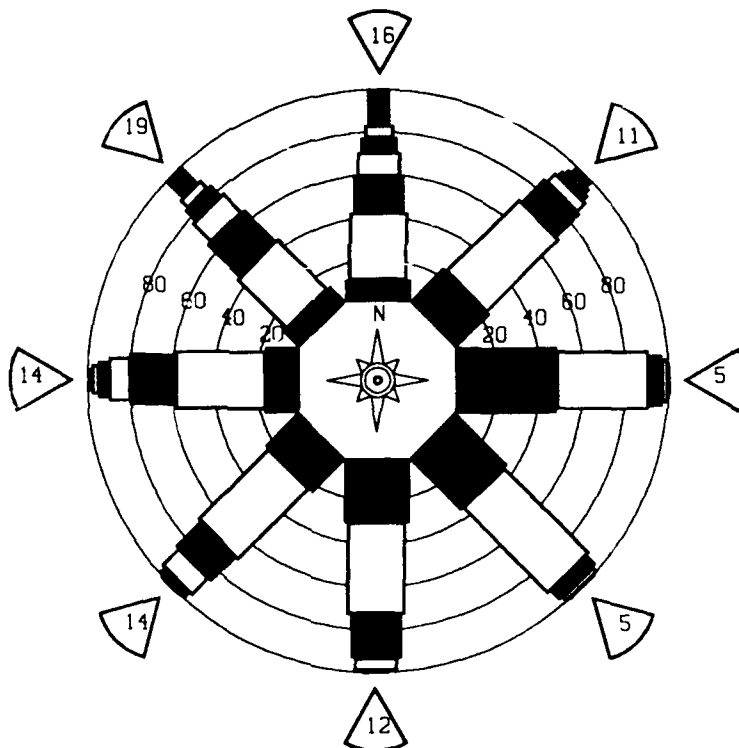
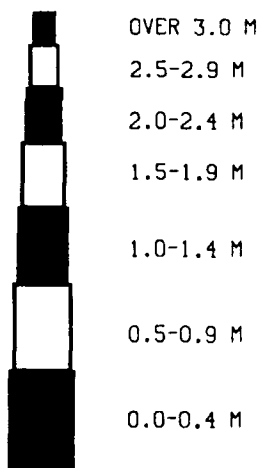
HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	105	302	117	6	2						532
0.50-0.99		368	1251	212	19	1					1851
1.00-1.49			496	771	124	8					1399
1.50-1.99			83	489	344	71	1				988
2.00-2.49				227	145	219	3				594
2.50-2.99				7	324	114	41	5			491
3.00-3.49					26	298	31	12	1		368
3.50-3.99						262	87	20	1		370
4.00-4.49						18	193	59	3		273
4.50-4.99							57	135	6		198
5.00-5.49							1	100	22		123
5.50-5.99								14	57		71
6.00-6.49								1	33	1	35
6.50-6.99									14	2	16
7.00+									2	7	9
TOTAL	105	670	1947	1712	984	991	414	346	139	10	
MEAN HS(M) = 1.8	LARGEST HS(M)=		8.1	MEAN TP(SEC)=		5.7	NO. OF CASES=		6865.		

STATION S51 46.65N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	351	1238	344	40	6						1979
0.50-0.99		1686	2051	288	53	10					4088
1.00-1.49			1039	584	92	23	1				1739
1.50-1.99			244	453	157	43	5				902
2.00-2.49			6	218	107	77	5				413
2.50-2.99				11	207	44	13				278
3.00-3.49					23	157	28	3			191
3.50-3.99						108	26	14			138
4.00-4.49						12	70	16			98
4.50-4.99							25	36			62
5.00-5.49							1	32			37
5.50-5.99								10			22
6.00-6.49									12		9
6.50-6.99									7		7
7.00+									1		4
TOTAL	351	2924	3684	1594	645	474	154	104	34	3	

MEAN HS(M)= 1.1 LARGEST HS(M)= 10.1 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION S1
46.65N, 86.43 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S51 (46.65N 86.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	0.9	0.9	0.9	0.6	0.5	0.5	0.4	0.6	0.8	1.1	1.0	0.7
1957	1.1	1.7	1.4	1.1	1.1	1.1	1.0	1.0	1.0	1.2	1.1	1.1	1.3
1958	1.3	2.3	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.1	1.1	1.2
1959	1.0	0.9	0.9	0.7	0.7	0.7	0.5	0.4	0.7	0.8	1.1	1.1	0.8
1960	1.4	1.7	1.2	1.2	1.2	0.7	0.6	0.7	0.8	1.1	1.5	1.4	1.1
1961	1.2	1.1	1.4	1.4	0.9	0.9	0.5	0.6	1.0	1.3	1.3	1.3	1.0
1962	1.6	1.2	0.9	1.1	0.7	0.6	0.7	0.6	0.8	1.1	1.2	1.1	1.0
1963	1.4	1.7	1.1	1.1	0.9	0.7	0.7	0.8	0.8	1.1	1.7	1.1	1.0
1964	1.6	1.9	1.8	1.3	1.0	0.9	0.7	0.9	1.0	1.3	1.2	1.3	1.2
1965	1.7	1.8	1.5	1.1	0.9	0.8	0.8	0.8	0.8	1.5	1.6	1.6	1.2
1966	1.5	1.7	2.0	1.1	1.2	0.8	0.8	0.7	1.0	1.5	2.2	1.9	1.3
1967	1.9	1.5	1.4	1.1	1.0	0.7	0.7	0.9	1.0	1.3	1.4	1.4	1.2
1968	1.4	2.6	1.6	1.1	0.9	0.7	0.7	0.8	0.8	1.3	1.7	1.9	1.3
1969	1.8	1.5	1.9	1.3	1.0	0.7	0.7	0.8	1.0	1.5	1.4	1.7	1.3
1970	1.9	2.1	1.4	1.4	1.2	0.8	0.8	0.8	1.1	1.2	1.8	1.5	1.0
1971	1.3	1.1	1.3	0.9	0.7	0.4	0.6	0.5	0.6	0.8	1.1	1.1	0.9
1972	1.4	1.1	1.2	0.7	0.4	0.6	0.7	0.7	1.2	1.5	1.1	1.1	1.0
1973	1.4	1.4	1.7	1.4	1.1	0.6	0.8	0.8	1.1	1.1	1.6	1.1	1.2
1974	1.4	1.1	1.2	1.2	0.7	0.7	0.6	0.6	0.9	1.2	1.2	1.4	1.0
1975	1.5	1.0	1.1	1.0	0.6	0.7	0.7	0.6	0.9	1.1	1.6	1.1	1.1
1976	1.6	1.6	1.7	1.4	0.9	0.7	0.7	0.8	1.1	0.9	1.4	1.1	1.2
1977	1.6	1.6	1.2	1.0	0.9	0.6	0.7	0.7	0.9	1.2	1.3	1.1	1.1
1978	2.1	1.3	1.1	1.0	1.0	0.7	0.7	0.8	0.8	1.2	1.3	1.1	1.1
1979	1.8	1.3	1.1	0.8	0.8	0.8	0.6	0.8	1.1	1.4	1.5	1.1	1.1
1980	1.3	1.1	1.3	1.1	0.7	0.7	0.5	0.6	0.9	1.2	0.9	1.2	1.0
1981	1.2	1.4	1.4	1.1	0.9	0.7	0.5	0.4	0.9	1.1	1.4	1.1	1.0
1982	2.0	1.3	1.7	1.4	0.7	0.7	0.7	0.6	1.1	1.2	1.3	1.4	1.2
1983	1.6	1.3	1.0	1.0	1.0	0.7	0.6	0.7	1.0	1.0	1.6	1.1	1.1
1984	1.4	1.6	0.8	1.1	0.9	0.7	0.6	0.6	0.9	1.0	1.1	1.1	1.1
1985	1.6	1.6	1.5	1.0	0.5	0.5	0.5	0.6	0.8	0.9	1.2	1.1	0.9
1986	1.7	0.9	1.4	1.1	0.7	0.7	0.5	0.5	0.6	0.9	1.1	1.1	0.9
1987	1.4	1.1	1.3	0.9	0.6	0.4	0.5	0.6	0.6	1.2	1.1	1.4	0.9
MEAN	1.5	1.5	1.4	1.1	0.8	0.7	0.6	0.7	0.9	1.2	1.4	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S51 (46.65N 86.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.8	4.1	3.3	3.4	2.0	1.7	1.5	1.7	2.8	4.5	4.0	3.8	
1957	3.8	5.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1958	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1959	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1960	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1961	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1962	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1963	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1964	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1965	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1966	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1967	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1968	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1969	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1970	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1971	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1972	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1973	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1974	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1975	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1976	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1977	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1978	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1979	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1980	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1981	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1982	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1983	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1984	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1985	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1986	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1987	3.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	

32 YR. STATISTICS FOR WIS STATION S51

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.9
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	10.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	1.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	150	641	240	6	10	1	.	.	.	.	1037
0.50-0.99	.	464	2277	250	10	1	.	.	.	.	3002
1.00-1.49	.	.	639	873	93	3	.	.	.	.	1608
1.50-1.99	.	.	55	574	257	41	.	.	.	.	927
2.00-2.49	.	.	.	255	186	131	.	.	.	.	572
2.50-2.99	.	.	.	7	361	60	7	1	.	.	436
3.00-3.49	36	379	8	2	.	.	425
3.50-3.99	275	60	7	.	.	337
4.00-4.49	22	199	7	1	.	228
4.50-4.99	71	48	.	.	120
5.00-5.49	9	62	3	.	74
5.50-5.99	41	8	.	49
6.00-6.49	5	11	.	16
6.50-6.99	9	4	7
7.00+	13
TOTAL	150	1105	3211	1965	943	912	354	168	39	4	

MEAN HS(M) = 1.5 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 5.2 NO. OF CASES= 8298.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	758	285	7	.	.	.	.	.	.	1202
0.50-0.99	.	528	2209	212	14	.	.	.	.	.	2963
1.00-1.49	.	.	490	496	51	4	.	.	.	.	1041
1.50-1.99	.	.	21	314	89	7	.	.	.	.	431
2.00-2.49	.	.	.	99	86	18	.	.	.	.	203
2.50-2.99	.	.	.	1	134	23	.	.	.	.	158
3.00-3.49	18	109	.	.	.	.	127
3.50-3.99	73	2	.	.	.	75
4.00-4.49	12	23	1	.	.	36
4.50-4.99	10	4	.	.	14
5.00-5.49	2	8	.	.	10
5.50-5.99	2	.	.	2
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	152	1286	3005	1129	392	246	37	16	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 5871.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	177	761	223	7	.	1	.	.	.	.	1168
0.50-0.99	.	405	1620	121	4	1	.	.	.	.	2151
1.00-1.49	.	.	388	449	36	3	.	.	.	.	876
1.50-1.99	.	.	22	242	97	2	.	.	.	.	363
2.00-2.49	.	.	.	94	77	21	.	.	.	.	192
2.50-2.99	.	.	.	2	137	25	.	.	.	.	164
3.00-3.49	4	110	.	.	.	.	114
3.50-3.99	72	3	.	.	.	75
4.00-4.49	2	18	.	.	.	20
4.50-4.99	7	2	.	.	9
5.00-5.49	3	4	.	.	7
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	177	1166	2253	915	355	236	31	6	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 4816.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	111	551	160	5	.	.	.	.	.	.	827
0.50-0.99	.	288	1205	73	2	2	.	.	.	.	1570
1.00-1.49	.	.	224	320	16	2	.	.	.	.	560
1.50-1.99	.	.	9	161	83	2	.	.	.	.	255
2.00-2.49	.	.	.	38	39	31	.	.	.	.	108
2.50-2.99	.	.	.	1	59	29	.	.	.	.	89
3.00-3.49	69	.	1	.	.	70
3.50-3.99	39	.	.	.	.	42
4.00-4.49	3	.	.	.	10
4.50-4.99	3	1	.	.	4
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	111	839	1598	598	199	172	16	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 3318.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	90	487	133	3							713
0.50-0.99		254	1100	82	3						1439
1.00-1.49			209	353	20	1					583
1.50-1.99			8	125	100						233
2.00-2.49				29	47	36					112
2.50-2.99				1	40	26					67
3.00-3.49					2	57	4				63
3.50-3.99						28	8				36
4.00-4.49							18				18
4.50-4.99							1	2			3
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	90	741	1450	593	212	148	31	3	0	0	3068.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 3068.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	70	403	97	5							575
0.50-0.99		385	839	117	3						1344
1.00-1.49			175	259	38						472
1.50-1.99			21	85	79	4					189
2.00-2.49			1	20	34	13					68
2.50-2.99				1	13	10					24
3.00-3.49					1	9					10
3.50-3.99						4	5				9
4.00-4.49							2				2
4.50-4.99								1			1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	70	788	1133	487	168	40	7	1	0	0	2529.

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 2529.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	120	656	189	9	1						975
0.50-0.99		889	913	225	5	1					2033
1.00-1.49			281	288	68	1					638
1.50-1.99			128	56	83	6					273
2.00-2.49			3	11	18	11					43
2.50-2.99						3	1				4
3.00-3.49						1					1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	120	1545	1514	589	175	23	1	0	0	0	3719.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 3719.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	817	240	8							1218
0.50-0.99		957	1006	233	4	1					2201
1.00-1.49			302	314	72	3					691
1.50-1.99			118	51	79	13					261
2.00-2.49			11	9	5	3					28
2.50-2.99				1	1	2					4
3.00-3.49											0
3.50-3.99							1				1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	152	1774	1677	617	161	22	1	0	0	0	4127.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 4127.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) -180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	191	1028	305	22	1						1547
0.50-0.99	.	887	1111	231	14	3	.	.	.	.	2246
1.00-1.49	.	1	424	232	79	4	.	.	.	.	740
1.50-1.99	.	.	187	47	48	4	.	.	.	.	286
2.00-2.49	.	.	22	11	3	4	.	.	.	.	40
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	191	1916	2049	543	145	15	0	0	0	0	
MEAN HS(M) = 0.7	LARGEST HS(M)= 2.4		MEAN TP(SEC)= 3.9		NO. OF CASES= 4551.						

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) -202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	182	1228	266	18							1694
0.50-0.99		1646	1087	190	10	1	.	.	.	.	2934
1.00-1.49			957	174	14	1	.	.	.	.	1156
1.50-1.99			356	79	27	3	.	.	.	.	465
2.00-2.49			23	83	5	7	.	.	.	.	118
2.50-2.99				14	10	.	.	.	.	.	24
3.00-3.49				1	6	.	.	.	.	.	7
3.50-3.99					.	.	.	.	.	.	0
4.00-4.49					.	2	.	.	.	.	2
4.50-4.99						.	.	.	.	.	0
5.00-5.49						.	.	.	.	.	0
5.50-5.99						.	.	.	.	.	0
6.00-6.49						.	.	.	.	.	0
6.50-6.99						.	.	.	.	.	0
7.00+						.	.	.	.	.	0
TOTAL	182	2874	2699	559	72	14	0	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		4.1	MEAN TP(SEC)=		3.7	NO. OF CASES=		5996.		

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	120	1002	375	13							1510
0.50-0.99	.	895	2641	242	16	2	.	.	.	.	3796
1.00-1.49	.	.	1009	793	42		.	.	.	.	1844
1.50-1.99	.	.	183	571	226	1	.	.	.	.	981
2.00-2.49	.	.	.	424	86	36	.	.	.	.	546
2.50-2.99	.	.	.	103	51	21	1	.	.	.	176
3.00-3.49	38	4	.	.	.	.	42
3.50-3.99	2	2	.	.	.	.	4
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	120	1897	4208	2146	461	67	1	0	0	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=	4.1	MEAN TP(SEC)=	4.4	NO. OF CASES=	8333.					

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	118	644	202	7							971
0.50-0.99	.	395	1915	134	16	2	.	.	.	.	2462
1.00-1.49	.	.	762	420	20	7	1	.	.	.	1210
1.50-1.99	.	.	68	434	28	2	.	.	.	.	532
2.00-2.49	.	.	.	151	130	2	.	.	.	.	283
2.50-2.99	.	.	.	31	91	12	.	.	.	.	134
3.00-3.49	22	32	.	.	.	.	54
3.50-3.99	4	8	.	.	.	.	12
4.00-4.49	6	.	.	.	.	8
4.50-4.99	2	.	.	.	3
5.00-5.49	1	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	118	1039	2947	1177	311	71	5	3	0	0	
MEAN HS (M) = 1.0	LARGEST HS (M) =		5.4	MEAN TP (SEC) =		4.4	NO. OF CASES =		5315.		

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	119	793	202	2	16	3	.	.	.	.	1116
0.50-0.99	.	501	2353	182	64	17	.	.	.	.	3055
1.00-1.49	.	.	790	760	64	17	.	.	.	.	1631
1.50-1.99	.	.	52	493	147	21	4	.	.	.	717
2.00-2.49	.	.	.	157	126	39	3	.	.	.	325
2.50-2.99	.	.	.	3	203	45	.	.	.	.	251
3.00-3.49	13	137	1	.	.	.	150
3.50-3.99	56	1	.	.	.	57
4.00-4.49	9	24	.	.	.	33
4.50-4.99	5	.	.	.	5
5.00-5.49	1	3	.	.	4
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	119	1294	3397	1597	569	327	38	4	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 6881.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	131	945	346	22	4	5	1	.	.	.	1448
0.50-0.99	.	614	3207	351	36	5	1	.	.	.	4214
1.00-1.49	.	1	932	1279	182	40	1	.	.	.	2435
1.50-1.99	.	.	84	596	318	71	2	.	.	.	1071
2.00-2.49	.	.	.	220	198	152	10	.	.	.	580
2.50-2.99	.	.	.	5	273	98	14	5	.	.	395
3.00-3.49	14	293	8	8	1	.	324
3.50-3.99	175	37	3	.	.	215
4.00-4.49	19	73	8	.	.	100
4.50-4.99	1	27	31	2	.	61
5.00-5.49	1	21	4	.	26
5.50-5.99	1	5	.	6
6.00-6.49	1	1	.	2
6.50-6.99	1	1	.	1
7.00+	1
TOTAL	131	1560	4569	2473	1025	854	174	78	15	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 10194.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	91	645	398	56	11	.	.	.	.	.	1201
0.50-0.99	.	499	2442	462	99	14	.	.	.	.	3516
1.00-1.49	.	1	678	1163	248	47	2	.	.	.	2139
1.50-1.99	.	.	.	534	456	144	4	.	.	.	1192
2.00-2.49	.	.	54	196	164	285	21	.	.	1	667
2.50-2.99	.	.	.	4	252	121	71	19	.	.	467
3.00-3.49	25	273	40	21	.	.	359
3.50-3.99	146	104	26	1	.	277
4.00-4.49	5	130	64	3	.	202
4.50-4.99	16	89	4	.	109
5.00-5.49	1	66	19	.	86
5.50-5.99	2	14	.	16
6.00-6.49	6	.	6
6.50-6.99	3	.	3
7.00+	1	2	3
TOTAL	91	1145	3572	2415	1255	1035	389	287	51	3	

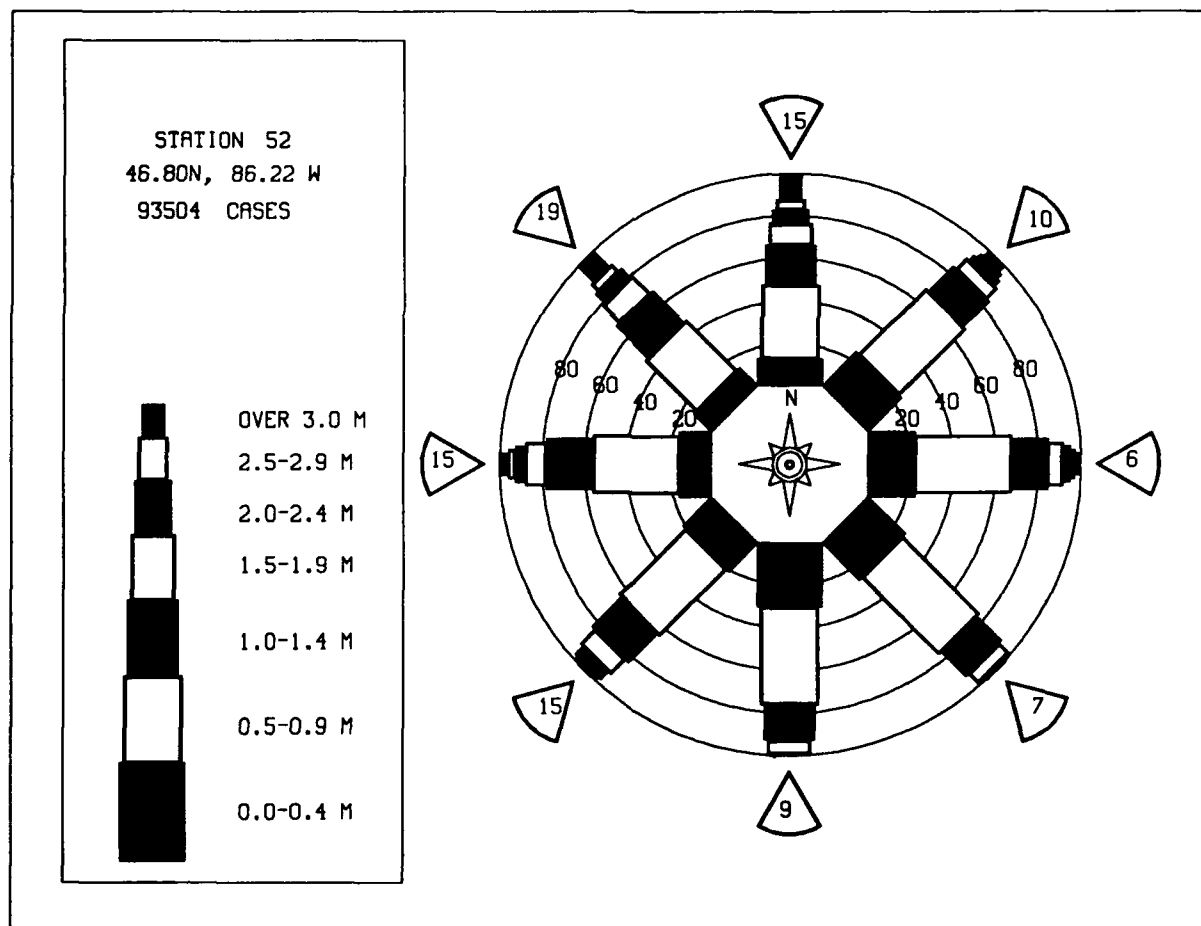
MEAN HS(M) = 1.4 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 5.3 NO. OF CASES= 9601.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	82	464	154	3	.	.	.	.	.	.	703
0.50-0.99	.	300	1463	201	16	.	.	.	.	.	1980
1.00-1.49	.	.	518	867	115	3	.	.	.	.	1503
1.50-1.99	.	.	63	468	389	62	.	.	.	.	982
2.00-2.49	.	.	.	211	163	213	3	.	.	.	590
2.50-2.99	.	.	.	8	311	103	40	3	.	.	465
3.00-3.49	20	290	28	16	1	.	355
3.50-3.99	1	185	86	10	.	.	282
4.00-4.49	13	149	43	1	.	206
4.50-4.99	25	109	5	.	139
5.00-5.49	71	12	.	83
5.50-5.99	14	22	.	36
6.00-6.49	16	.	16
6.50-6.99	4	.	4
7.00+	1	1	2
TOTAL	82	764	2198	1758	1015	869	331	266	62	1	

MEAN HS(M) = 1.6 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 5.5 NO. OF CASES= 6887.

STATION 52 46.80N 86.22W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.0+ LONGER
0.00-0.49	206	1183	382	20	1					1792
0.50-0.99		991	2739	331	27	3				4091
1.00-1.49			879	904	116	13				1912
1.50-1.99			143	483	251	38				916
2.00-2.49			6	201	137	100				447
2.50-2.99				18	194	58				285
3.00-3.49					20	176				209
3.50-3.99						106				141
4.00-4.49						9				86
4.50-4.99							31			46
5.00-5.49							65			28
5.50-5.99							17			11
6.00-6.49							1			3
6.50-6.99										1
7.00+										1
TOTAL	206	2174	4149	1957	746	503	140	80	14	0
MEAN HS(M)= 1.1 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S52 (46.80N 86.22W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	1.1	1.0	1.0	0.7	0.6	0.5	0.5	0.7	1.0	1.2	1.2	0.9
1957	2.0	1.6	1.3	1.1	1.1	0.9	0.8	0.9	1.3	1.1	1.5	1.9	1.3
1958	1.4	2.2	1.0	1.2	1.0	0.9	0.6	0.6	0.9	1.0	2.0	1.5	1.2
1959	1.2	1.2	1.0	0.9	0.9	0.6	0.5	0.5	0.8	1.0	1.4	1.5	1.0
1960	1.4	1.6	1.1	1.1	1.1	0.6	0.5	0.6	0.7	1.1	1.6	1.4	1.1
1961	1.1	1.1	1.5	0.9	0.9	0.7	0.5	0.6	1.0	1.2	1.3	1.3	1.0
1962	1.7	1.3	0.9	1.1	0.7	0.5	0.6	0.6	0.8	1.0	1.2	1.7	1.0
1963	1.4	1.6	1.5	1.1	0.8	0.7	0.7	0.9	0.8	1.0	1.6	1.6	1.1
1964	1.7	1.8	1.7	1.3	1.0	0.8	0.6	0.9	1.0	1.2	1.3	1.3	1.1
1965	1.8	1.8	1.4	0.9	0.8	0.8	0.7	0.7	0.8	1.3	1.7	1.7	1.2
1966	1.6	1.7	2.0	1.1	1.1	0.7	0.8	0.7	1.0	1.3	2.0	1.9	1.3
1967	1.9	2.0	1.4	1.1	1.0	0.7	0.7	0.8	1.0	1.3	1.4	1.5	1.2
1968	1.5	2.5	1.6	1.1	0.9	0.7	0.7	0.8	0.8	1.3	1.8	1.9	1.3
1969	1.8	1.4	1.7	1.2	0.9	0.7	0.6	0.8	1.0	1.3	1.4	1.7	1.2
1970	1.8	2.0	1.4	1.4	1.1	0.8	0.8	0.8	1.1	1.2	1.7	1.6	1.3
1971	1.5	1.5	1.5	1.0	0.8	0.5	0.6	0.6	0.7	1.0	1.2	1.4	1.0
1972	1.6	1.3	1.4	0.8	0.5	0.6	0.7	0.7	1.2	1.5	1.2	1.6	1.1
1973	1.5	1.4	1.6	1.3	0.7	0.6	0.7	0.7	1.0	1.1	1.6	1.5	1.2
1974	1.2	1.3	1.1	1.1	0.7	0.7	0.6	0.6	0.9	1.2	1.2	1.4	1.0
1975	1.5	1.0	1.3	0.9	0.5	0.7	0.6	0.7	0.9	1.2	1.6	1.4	1.0
1976	1.7	1.7	1.8	1.3	0.9	0.7	0.6	0.6	1.0	0.9	1.4	1.5	1.1
1977	1.5	1.6	1.2	0.8	0.6	0.7	0.6	0.7	0.9	1.1	1.3	1.4	1.0
1978	1.9	1.2	1.1	1.0	0.8	0.7	0.6	0.6	0.8	1.2	1.4	1.3	1.1
1979	1.6	1.3	1.4	0.8	0.7	0.7	0.6	0.6	1.0	1.2	1.5	1.5	1.1
1980	1.3	1.0	1.3	1.0	0.6	0.6	0.6	0.6	0.9	1.2	1.0	1.3	1.0
1981	1.0	1.2	1.2	1.0	0.7	0.6	0.6	0.6	0.9	1.1	1.4	1.3	0.9
1982	2.0	1.3	1.7	1.3	0.6	0.6	0.6	0.6	1.1	1.1	1.2	1.4	1.1
1983	1.5	1.2	1.9	0.9	0.9	0.6	0.6	0.6	0.8	1.0	1.7	1.6	1.1
1984	1.3	1.5	1.7	1.1	0.8	0.6	0.6	0.5	0.9	1.0	1.7	1.7	1.1
1985	1.6	1.6	1.5	1.0	0.5	0.6	0.6	0.6	0.8	1.0	1.2	1.5	1.0
1986	0.9	1.4	1.1	1.1	0.7	0.4	0.4	0.5	0.7	0.8	1.2	1.3	0.9
1987	1.4	1.1	1.3	0.9	0.6	0.4	0.5	0.6	0.7	1.2	1.3	1.4	1.0
MEAN	1.5	1.5	1.4	1.1	0.8	0.7	0.6	0.7	0.9	1.2	1.4	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S52 (46.80N 86.22W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.2	4.0	4.0	3.6	2.0	1.8	1.5	1.3	2.8	4.9	3.7	3.9	
1957	5.3	5.3	4.2	4.9	3.2	3.4	4.3	2.8	4.6	4.0	6.1	5.5	
1958	5.0	5.2	3.8	4.2	3.9	3.5	2.2	2.5	3.5	3.6	5.3	4.4	
1959	3.5	4.1	4.6	2.9	3.6	3.4	1.4	1.4	3.6	4.3	4.6	5.4	
1960	4.8	5.4	4.3	3.5	4.1	3.5	2.2	2.2	3.5	5.9	5.6	4.0	
1961	6.9	3.8	5.3	3.4	3.0	3.8	2.5	2.4	3.1	4.7	4.1	4.7	
1962	4.7	4.7	3.7	3.8	3.1	1.9	2.6	2.9	2.8	4.9	3.7	5.1	
1963	3.6	5.8	6.1	5.1	3.0	2.6	2.3	3.0	3.4	3.2	6.0	5.8	
1964	5.1	4.8	5.1	4.1	3.4	4.1	2.3	2.6	4.1	5.4	4.7	4.1	
1965	5.1	5.4	5.3	3.5	2.1	2.4	2.2	2.9	2.5	5.4	5.9	5.8	
1966	4.7	5.1	6.0	3.7	4.4	2.9	2.9	3.1	3.7	5.0	8.3	4.9	
1967	6.0	5.8	4.4	4.0	3.7	2.3	3.4	2.7	3.5	3.8	4.5	4.1	
1968	5.0	6.3	6.1	4.7	2.9	2.8	3.1	3.0	2.3	4.9	6.3	6.0	
1969	5.6	5.9	6.0	3.9	2.9	2.7	2.7	2.8	3.3	4.4	4.9	6.8	
1970	5.7	5.7	4.1	4.9	4.2	2.8	3.2	3.0	4.5	4.3	6.5	6.8	
1971	5.5	5.7	5.3	3.5	2.9	1.1	2.3	2.0	2.6	3.4	4.3	5.1	
1972	6.6	5.5	4.4	3.6	1.8	1.8	2.4	2.8	4.6	7.7	4.5	7.0	
1973	4.8	4.0	6.2	3.7	3.8	1.6	2.0	3.0	4.0	5.2	4.9	4.1	
1974	5.2	5.5	3.9	3.9	2.0	2.1	1.8	2.0	3.0	3.9	4.4	5.7	
1975	4.6	3.7	4.3	3.1	1.7	2.7	1.9	2.4	2.7	4.3	5.8	4.7	
1976	5.7	6.1	5.4	3.7	3.6	2.0	2.0	3.1	3.3	3.5	4.7	5.4	
1977	4.9	5.0	5.4	4.2	2.4	2.9	3.1	3.0	5.4	3.5	5.6	4.1	
1978	7.8	4.4	5.3	4.9	3.8	2.2	1.9	2.6	3.0	3.8	4.2	4.2	
1979	4.5	4.1	6.8	5.0	2.5	2.6	1.9	3.8	3.0	4.8	4.2	4.8	
1980	5.4	3.8	5.3	4.2	3.1	2.4	1.9	1.8	3.9	5.1	4.4	4.5	
1981	3.5	4.3	4.7	3.8	3.4	3.1	1.6	1.8	4.8	4.5	4.7	4.0	
1982	7.0	4.1	6.0	5.4	2.5	2.6	2.6	2.1	3.8	4.9	5.5	4.0	
1983	5.8	5.3	6.7	2.6	3.2	2.3	2.1	2.0	2.5	4.5	4.6	5.4	
1984	5.1	5.6	5.8	4.2	3.4	2.8	1.6	2.2	2.4	3.9	5.4	5.6	
1985	4.9	5.5	4.8	5.0	2.2	3.5	1.2	2.5	2.8	3.2	3.7	7.5	
1986	6.1	3.6	6.1	4.3	3.4	2.3	1.2	1.9	2.9	4.2	3.9	3.5	
1987	4.9	7.2	5.2	4.1	3.1	1.7	1.7	2.9	2.8	5.6	4.5	5.3	

32 YR. STATISTICS FOR WIS STATION S52

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.9
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	5.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66112812

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	158	853	347	10							1368
0.50-0.99		485	2305	233	9	1					3033
1.00-1.49			581	822	120	3					1526
1.50-1.99			53	467	236	36					792
2.00-2.49				195	151	119	3				468
2.50-2.99				8	345	57	6	1			417
3.00-3.49					36	296	2	2			336
3.50-3.99					1	225	17	1			244
4.00-4.49						51	72	1			124
4.50-4.99						1	68	5	1		75
5.00-5.49							13	26	3		42
5.50-5.99								5			5
6.00-6.49								7	4		11
6.50-6.99								1	2		3
7.00+									1		1
TOTAL	158	1338	3286	1735	898	789	181	49	11	0	

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 7915.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	118	691	213	5							1027
0.50-0.99		405	1710	144	5		1				2265
1.00-1.49			396	423	35	1					855
1.50-1.99			12	286	84	7					389
2.00-2.49				106	80	17					203
2.50-2.99				1	133	16					150
3.00-3.49					19	99	1				119
3.50-3.99					1	82	6				89
4.00-4.49						16	13	2			31
4.50-4.99						1	6				7
5.00-5.49							3	1			4
5.50-5.99											0
6.00-6.49									1		0
6.50-6.99											0
7.00+											0
TOTAL	118	1096	2331	965	357	239	30	3	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 4819.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	130	602	161	2							895
0.50-0.99		274	1374	99	6	1					1754
1.00-1.49			363	427	14	2					806
1.50-1.99			14	235	58	1					308
2.00-2.49				106	74	17					197
2.50-2.99					127	21	1				149
3.00-3.49					5	90					95
3.50-3.99						33					33
4.00-4.49						9					14
4.50-4.99							6				6
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	130	876	1912	869	284	174	12	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 3993.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	77	516	103	2							698
0.50-0.99		291	1223	68	5						1587
1.00-1.49			260	332	13	1					606
1.50-1.99			14	157	80	2					253
2.00-2.49				41	47	10					98
2.50-2.99					71	35					106
3.00-3.49					2	81	1				84
3.50-3.99						25	2				27
4.00-4.49						1	8				9
4.50-4.99							1	1			2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	77	807	1600	600	218	155	12	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 3256.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	72	520	125	3	2	.	.	.	.	.	720
0.50-0.99	.	297	1258	68	18	.	.	.	.	.	1625
1.00-1.49	.	.	264	404	106	2	.	.	.	.	686
1.50-1.99	.	.	13	186	75	22	.	.	.	.	307
2.00-2.49	.	.	.	34	63	35	.	.	.	.	131
2.50-2.99	1	70	2	.	.	.	98
3.00-3.49	34	5	.	.	.	73
3.50-3.99	5	2	1	.	.	39
4.00-4.49	12
4.50-4.99	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	72	817	1660	695	265	168	16	1	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 3464.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	90	494	109	3	.	.	.	.	.	.	696
0.50-0.99	.	439	946	120	3	.	.	.	.	.	1508
1.00-1.49	.	.	223	316	39	1	.	.	.	.	579
1.50-1.99	.	.	23	125	115	3	.	.	.	.	286
2.00-2.49	.	.	2	40	43	13	.	.	.	.	98
2.50-2.99	.	.	.	1	20	11	.	.	.	.	32
3.00-3.49	14	.	.	.	.	14
3.50-3.99	10	1	.	.	.	11
4.00-4.49	3	.	.	.	3
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	90	933	1303	605	220	52	4	2	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3012.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	115	773	163	9	.	.	.	.	.	.	1060
0.50-0.99	.	1014	1205	251	3	.	.	.	.	.	2473
1.00-1.49	.	.	352	436	74	1	.	.	.	.	863
1.50-1.99	.	.	146	72	118	7	.	.	.	.	343
2.00-2.49	.	.	4	11	23	17	.	.	.	.	55
2.50-2.99	.	.	.	1	1	4	1	.	.	.	7
3.00-3.49	1	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	115	1787	1870	780	219	29	2	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 4500.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9	
0.00-0.49	175	1137	255	7	.	.	.	.	.	.	1574
0.50-0.99	.	1143	1317	294	7	.	.	.	.	.	2761
1.00-1.49	.	.	388	394	104	3	.	.	.	.	889
1.50-1.99	.	.	137	39	100	13	.	.	.	.	289
2.00-2.49	.	.	7	4	6	2	.	.	.	.	19
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	175	2280	2104	738	217	18	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 5182.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	241	1129	288	10							1668
0.50-0.99		845	879	174	11	1					1910
1.00-1.49			394	168	53	2					617
1.50-1.99			110	18	20	5					153
2.00-2.49			7	3		3					13
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	241	1974	1678	373	84	11	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4086.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	247	1013	225	8							1493
0.50-0.99		1343	579	159	7	1					2089
1.00-1.49			511	90	21	1					623
1.50-1.99			98	3	12	3					116
2.00-2.49			4			1					8
2.50-2.99				2			1				3
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	247	2356	1417	265	40	6	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4058.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	975	607	18							1752
0.50-0.99		1306	1384	579	13	1					3283
1.00-1.49			367	592	267	4					1230
1.50-1.99			194	241	147	55					637
2.00-2.49			11	65	62	32					170
2.50-2.99				7	10	4					21
3.00-3.49				2		1					3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	152	2281	2563	1504	499	97	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 6647.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	128	733	355	5							1221
0.50-0.99		671	1946	264	16	1					2898
1.00-1.49			531	685	50	4					1270
1.50-1.99			47	334	176	4					561
2.00-2.49			2	99	177	17					295
2.50-2.99				2	43	42					87
3.00-3.49					3	11					14
3.50-3.99						5	3				8
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	128	1404	2881	1389	465	84	3	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5951.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	151	898	343	3	14	1	1	.	.	.	1395
0.50-0.99	.	563	2475	252	181	10	.	.	.	.	3306
1.00-1.49	.	.	803	865	60	24	1	.	.	.	1738
1.50-1.99	.	.	57	500	181	24	1	.	.	.	763
2.00-2.49	.	.	.	142	190	58	1	.	.	.	391
2.50-2.99	.	.	.	5	182	71	.	.	.	.	258
3.00-3.49	8	145	2	.	.	.	155
3.50-3.99	74	11	.	.	.	85
4.00-4.49	6	26	.	.	.	32
4.50-4.99	6	.	.	.	8
5.00-5.49	2	.	.	4
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	151	1461	3678	1767	635	389	48	7	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 7624.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	133	1125	558	28	6	1	.	.	.	.	1851
0.50-0.99	.	664	3365	416	56	13	.	.	1	.	4516
1.00-1.49	.	.	1	1294	181	36	1	.	.	.	2461
1.50-1.99	.	.	81	620	343	74	3	.	1	.	1121
2.00-2.49	.	.	1	208	208	176	10	1	.	1	605
2.50-2.99	.	.	.	6	254	115	20	3	.	.	398
3.00-3.49	20	278	13	3	.	.	321
3.50-3.99	155	100	12	.	.	219
4.00-4.49	19	21	32	2	.	133
4.50-4.99	2	28	3	.	34
5.00-5.49	6	3	2	33
5.50-5.99	3	.	16
6.00-6.49	3	1	2
6.50-6.99	1	.	0
7.00+	0
TOTAL	133	1790	4950	2572	1068	867	232	96	21	4	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 10990.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	144	819	550	74	10	.	.	.	.	.	1597
0.50-0.99	.	495	2577	557	113	11	.	.	.	.	3753
1.00-1.49	.	.	737	1190	305	45	2	.	.	.	2279
1.50-1.99	.	.	79	555	482	150	5	1	.	.	1272
2.00-2.49	.	.	.	210	199	270	20	.	.	.	699
2.50-2.99	.	.	.	8	251	125	64	10	.	.	458
3.00-3.49	25	289	48	34	.	.	396
3.50-3.99	144	84	34	1	.	263
4.00-4.49	6	114	55	7	.	182
4.50-4.99	20	59	25	.	104
5.00-5.49	1	49	17	.	67
5.50-5.99	5	28	2	35
6.00-6.49	7	2	9
6.50-6.99	2	2	4
7.00+	2	3	5
TOTAL	144	1314	3943	2594	1385	1040	358	247	89	9	

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 5.3 NO. OF CASES= 10423.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

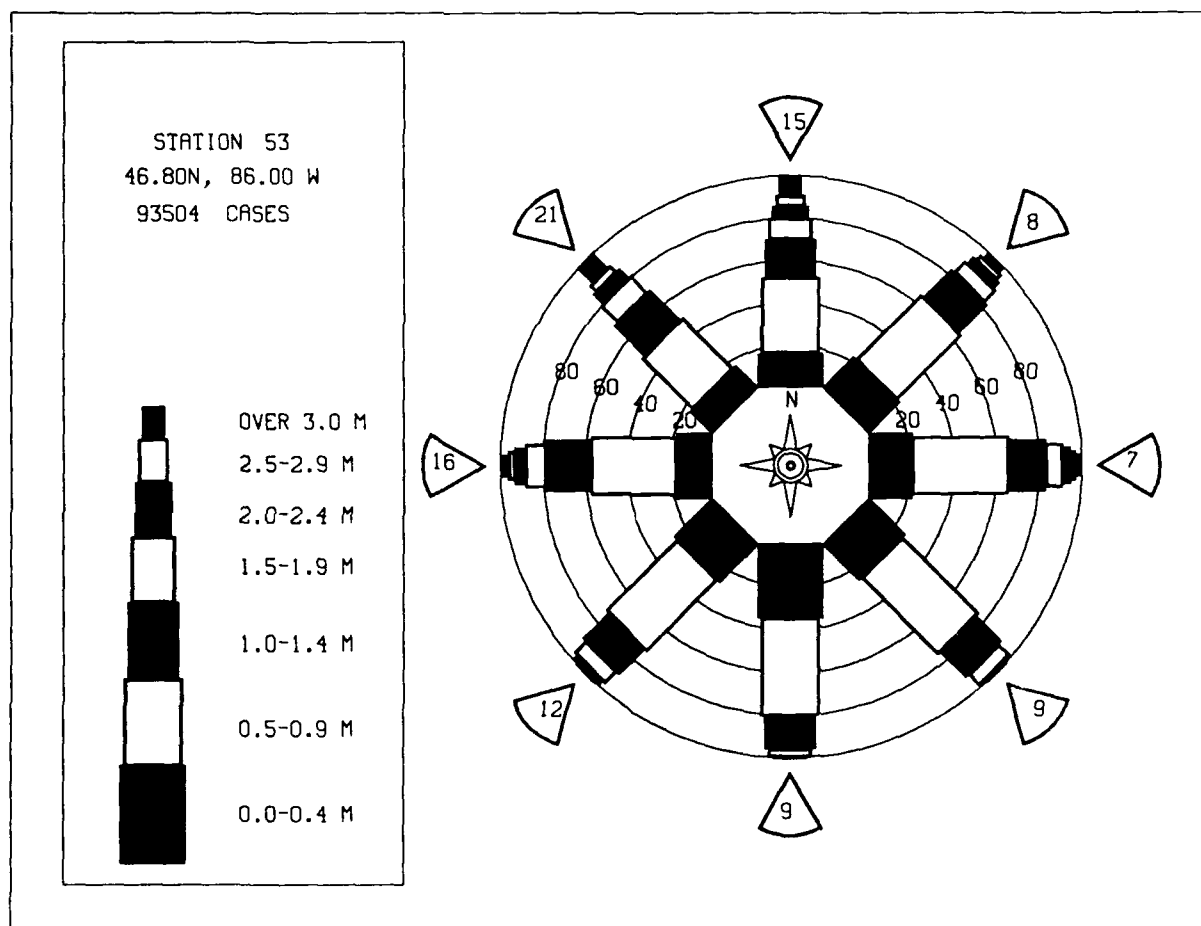
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	141	625	197	3	2	.	.	.	.	.	968
0.50-0.99	.	342	1780	239	12	.	.	.	.	.	2373
1.00-1.49	.	.	525	905	121	2	.	.	.	.	1553
1.50-1.99	.	.	54	505	419	77	.	.	.	.	1055
2.00-2.49	.	.	.	209	185	236	4	.	.	.	634
2.50-2.99	.	.	.	6	306	122	48	4	.	.	486
3.00-3.49	43	281	32	13	.	.	369
3.50-3.99	1	166	64	16	1	.	248
4.00-4.49	22	105	62	4	.	193
4.50-4.99	1	39	62	7	.	109
5.00-5.49	1	38	20	.	59
5.50-5.99	8	14	2	24
6.00-6.49	12	.	12
6.50-6.99	4	.	4
7.00+	2
TOTAL	141	967	2556	1867	1089	907	293	203	62	4	

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 5.3 NO. OF CASES= 7584.

STATION S53 46.80N 86.00W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	228	1291	460	19	1						1999
0.50-0.99		1058	2633	392	28	3					4114
1.00-1.49			764	935	148	11					1858
1.50-1.99			114	434	268	46					862
2.00-2.49			4	148	152	101	3				408
2.50-2.99				5	181	66	14	1			267
3.00-3.49					16	166	10	5			197
3.50-3.99						95	25	5			125
4.00-4.49						13	45	13	1		72
4.50-4.99							17	16	3		36
5.00-5.49							2	14	4		20
5.50-5.99								2	5		7
6.00-6.49									2		2
6.50-6.99									1		1
7.00+											0
TOTAL	228	2349	3975	1933	794	501	116	56	16	0	

MEAN HS(M)= 1.1 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S53 (46.80N 86.00W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	1.2	1.1	1.1	0.7	0.6	0.6	0.6	0.7	1.0	1.2	1.2	0.9
1957	1.8	1.5	1.3	1.0	1.0	0.8	0.7	0.8	1.1	1.1	1.5	1.8	1.2
1958	1.3	2.1	1.0	1.1	1.0	0.8	0.6	0.6	0.8	1.0	2.0	1.4	1.1
1959	1.3	1.3	1.1	0.9	1.0	0.6	0.6	0.6	0.9	1.1	1.5	1.6	1.1
1960	1.4	1.5	1.0	1.1	1.0	0.6	0.6	0.6	0.7	1.1	1.6	1.3	1.0
1961	1.1	1.1	1.5	0.9	0.8	0.7	0.5	0.5	0.9	1.1	1.3	1.3	1.0
1962	1.6	1.2	0.9	1.0	0.7	0.5	0.5	0.6	0.8	0.9	1.1	1.6	1.0
1963	1.3	1.5	1.3	1.1	0.8	0.6	0.6	0.7	0.7	0.9	1.6	1.6	1.0
1964	1.6	1.7	1.6	1.2	1.0	0.7	0.6	0.9	1.0	1.2	1.3	1.3	1.1
1965	1.7	1.8	1.3	0.9	0.7	0.7	0.7	0.7	0.8	1.4	1.6	1.6	1.1
1966	1.6	1.6	1.9	1.1	1.1	0.7	0.8	0.7	1.0	1.5	1.8	1.7	1.3
1967	1.8	1.9	1.4	1.1	1.0	0.6	0.7	0.8	0.9	1.3	1.4	1.5	1.2
1968	1.4	2.5	1.5	1.1	0.9	0.6	0.7	0.7	0.8	1.2	1.8	1.8	1.2
1969	1.8	1.3	1.6	1.1	0.8	0.7	0.6	0.7	0.9	1.3	1.4	1.1	1.1
1970	1.6	1.8	1.3	1.2	1.0	0.7	0.7	0.7	1.0	1.1	1.6	1.5	1.2
1971	1.6	1.5	1.6	1.1	0.8	0.5	0.6	0.6	0.7	1.0	1.2	1.4	1.1
1972	1.7	1.4	1.4	0.9	0.6	0.5	0.7	0.7	1.1	1.5	1.1	1.1	1.1
1973	1.4	1.3	1.5	1.2	0.9	0.5	0.7	0.7	1.0	1.1	1.6	1.6	1.1
1974	1.2	1.1	1.3	1.0	0.7	0.5	0.6	0.6	0.8	1.1	1.2	1.3	0.9
1975	1.4	1.0	1.3	0.8	0.5	0.6	0.6	0.6	0.8	1.1	1.5	1.0	1.0
1976	1.7	1.6	1.7	1.2	0.8	0.6	0.6	0.7	1.0	0.9	1.4	1.1	1.1
1977	1.5	1.1	1.2	0.7	0.5	0.7	0.6	0.6	0.8	1.0	1.2	1.1	1.0
1978	1.8	1.1	1.0	1.0	0.7	0.6	0.6	0.8	1.1	1.1	1.3	1.1	1.0
1979	1.5	1.2	1.3	0.8	0.6	0.5	0.7	0.7	0.9	1.1	1.4	1.1	1.0
1980	1.3	1.0	1.3	0.9	0.6	0.6	0.4	0.5	0.9	1.2	1.0	1.1	0.9
1981	1.0	1.1	1.2	0.9	0.7	0.6	0.4	0.4	1.0	1.0	1.3	1.1	0.9
1982	1.9	1.2	1.6	1.2	0.6	0.5	0.6	0.5	1.1	1.0	1.2	1.1	1.0
1983	1.4	1.1	1.7	0.9	0.6	0.5	0.5	0.5	0.7	1.0	1.1	1.1	1.0
1984	1.2	1.3	1.5	1.0	0.8	0.5	0.5	0.5	0.8	1.0	1.6	1.1	1.0
1985	1.6	1.4	1.4	0.9	0.5	0.6	0.4	0.3	0.7	0.9	1.1	1.2	1.0
1986	1.5	0.9	1.3	1.1	0.6	0.5	0.4	0.3	0.7	0.8	1.1	1.3	0.9
1987	1.4	1.1	1.3	0.9	0.6	0.5	0.5	0.6	0.7	1.1	1.3	1.3	0.9
MEAN	1.5	1.4	1.3	1.0	0.8	0.6	0.6	0.6	0.9	1.1	1.4	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S53 (46.80N 86.00W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.2	4.1	4.0	3.8	3.9	2.1	1.9	1.8	2.0	3.3	4.0	4.1
1957	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1958	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1959	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1960	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1961	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1962	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1963	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1964	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1965	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1966	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1967	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1968	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1969	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1970	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1971	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1972	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1973	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1974	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1975	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1976	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1977	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1978	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1979	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1980	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1981	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1982	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1983	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1984	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1985	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1986	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1987	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

32 YR. STATISTICS FOR WIS STATION S53

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	312.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	72100900

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	118	654	190	1	.	1	.	.	.	.	964
0.50-0.99	.	370	1692	210	6	.	.	.	.	.	2278
1.00-1.49	.	.	652	423	109	4	.	.	.	.	1188
1.50-1.99	.	.	98	281	207	52	1	.	.	.	639
2.00-2.49	.	.	.	205	146	135	2	.	.	.	488
2.50-2.99	.	.	.	57	79	211	13	1	.	.	361
3.00-3.49	.	.	.	1	23	156	35	3	.	.	218
3.50-3.99	3	38	71	9	.	.	121
4.00-4.49	2	43	28	1	.	74
4.50-4.99	2	13	2	.	17
5.00-5.49	9	2	.	11
5.50-5.99	1	3	.	4
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	118	1024	2632	1178	573	599	167	64	8	0	5967.

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 5967.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	82	401	124	3	.	.	.	.	.	.	610
0.50-0.99	.	272	1261	97	5	.	.	.	.	.	1635
1.00-1.49	.	.	441	342	43	1	.	.	.	.	827
1.50-1.99	.	.	37	271	109	16	.	.	.	.	433
2.00-2.49	.	.	.	93	78	25	1	.	.	.	197
2.50-2.99	.	.	.	17	97	53	3	.	.	.	170
3.00-3.49	16	124	17	2	.	.	159
3.50-3.99	3	47	17	3	.	.	70
4.00-4.49	10	10	4	.	.	24
4.50-4.99	1	3	1	.	.	5
5.00-5.49	1	.	.	1
5.50-5.99	1	.	1	1	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	82	673	1863	823	351	278	51	12	1	0	3876.

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 3876.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	83	474	108	1	.	.	.	.	.	.	666
0.50-0.99	.	268	1285	89	9	.	.	.	.	.	1651
1.00-1.49	.	.	356	425	17	3	.	.	.	.	801
1.50-1.99	.	.	8	233	67	2	.	.	.	.	310
2.00-2.49	.	.	.	71	59	8	1	.	.	.	139
2.50-2.99	106	25	.	.	.	.	131
3.00-3.49	3	99	.	.	.	.	102
3.50-3.99	27	1	.	.	.	28
4.00-4.49	6	6	.	.	.	12
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	83	742	1757	819	261	170	10	0	0	0	3604.

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 3604.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	62	457	64	1	.	.	.	.	.	.	584
0.50-0.99	.	300	1226	66	3	.	.	.	.	.	1595
1.00-1.49	.	.	315	353	71	2	.	.	.	.	681
1.50-1.99	.	.	13	183	54	2	.	.	.	.	272
2.00-2.49	.	.	.	42	54	3	.	.	.	.	101
2.50-2.99	90	20	.	.	.	.	110
3.00-3.49	3	63	.	.	.	.	68
3.50-3.99	22	.	.	.	.	22
4.00-4.49	1	2	.	.	.	3
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	62	757	1618	645	237	115	2	1	0	0	3225.

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 3225.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	77	583	90	2							752
0.50-0.99		382	1589	60	1						2032
1.00-1.49			343	449	10						802
1.50-1.99			17	250	127	1					395
2.00-2.49				62	85	9					156
2.50-2.99				1	118	23					142
3.00-3.49					1	89					90
3.50-3.99						34					34
4.00-4.49						1					2
4.50-4.99							3				3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	77	965	2039	824	342	157	4	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4131.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	70	630	108	2							810
0.50-0.99		539	1390	105	1						2035
1.00-1.49			340	408	26						774
1.50-1.99			23	203	142	2					370
2.00-2.49			1	70	64	14					149
2.50-2.99				2	42	10					54
3.00-3.49					1	27					28
3.50-3.99						11					11
4.00-4.49							4				4
4.50-4.99							2				2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	70	1169	1862	790	276	64	6	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 3972.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	147	1122	185	8							1462
0.50-0.99		1384	1807	267	5						3463
1.00-1.49			457	662	75						1194
1.50-1.99			181	131	228	14					554
2.00-2.49			12	18	28	22					80
2.50-2.99					1	4	1				6
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	147	2506	2642	1086	337	40	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 6331.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	179	1144	199	6							1528
0.50-0.99		1186	1356	260	2						2804
1.00-1.49			351	406	71	2					830
1.50-1.99			118	40	62	6					226
2.00-2.49			3	2	1	3					9
2.50-2.99				1			1				2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	179	2330	2027	715	136	11	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 5056.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	210	907	174	11	1	.	.	.	.	.	1303
0.50-0.99	.	799	593	130	6	1	.	.	.	.	1529
1.00-1.49	.	.	272	83	23	1	.	.	.	.	379
1.50-1.99	.	.	45	3	20	.	.	.	.	.	68
2.00-2.49	.	.	3	1	.	1	.	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	210	1706	1087	228	50	3	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3079.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	234	829	163	7	.	.	.	.	.	.	1233
0.50-0.99	.	988	405	93	9	.	.	.	.	.	1495
1.00-1.49	.	.	300	51	23	1	.	.	.	.	375
1.50-1.99	.	.	55	4	4	4	.	.	.	.	67
2.00-2.49	.	.	1	2	.	.	.	.	.	.	3
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	234	1817	924	158	36	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 2974.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	152	912	524	26	.	.	.	.	.	.	1614
0.50-0.99	.	1304	687	469	39	.	.	.	.	.	2499
1.00-1.49	.	.	333	156	225	31	.	.	.	.	745
1.50-1.99	.	.	260	21	27	40	2	.	.	.	350
2.00-2.49	.	.	16	28	4	4	.	.	.	.	52
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	152	2216	1820	705	295	75	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4933.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	143	812	552	19	.	.	.	.	.	.	1526
0.50-0.99	.	882	1558	601	23	.	.	.	.	.	3064
1.00-1.49	.	.	325	612	243	10	.	.	.	.	1190
1.50-1.99	.	.	129	145	214	16	.	.	.	.	504
2.00-2.49	.	.	16	39	82	52	.	.	.	.	189
2.50-2.99	.	.	.	5	10	17	.	.	.	.	32
3.00-3.49	1	7	3	.	.	.	11
3.50-3.99	2	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	143	1694	2580	1421	573	102	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 6105.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	160	920	512	3	1						1596
0.50-0.99		591	2734	366	13	1	1				3706
1.00-1.49			749	983	75	7					1814
1.50-1.99			74	501	239	22					836
2.00-2.49				161	205	75	2				443
2.50-2.99				7	171	79	2				259
3.00-3.49					11	158	6				175
3.50-3.99						65	24				89
4.00-4.49						5	35	4			47
4.50-4.99							6	1			7
5.00-5.49								5			5
5.50-5.99								1			2
6.00-6.49									1		0
6.50-6.99											0
7.00+											0
TOTAL	160	1511	4069	2021	715	412	76	11	1	0	8409

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 8409.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	194	1201	687	43	10						2135
0.50-0.99		701	3453	513	81	11	3		1		4763
1.00-1.49			898	1311	190	44	1	1	1		2446
1.50-1.99			83	608	349	70	4	1			1115
2.00-2.49			1	257	214	176	10	2	1		661
2.50-2.99				12	272	113	18	4		1	420
3.00-3.49					32	278	24	5			340
3.50-3.99						145	59	8			215
4.00-4.49						14	109	17	1		141
4.50-4.99							28	43	2		73
5.00-5.49							2	35	4		41
5.50-5.99								7	10	1	18
6.00-6.49								1	9	2	12
6.50-6.99									2		2
7.00+										1	1
TOTAL	194	1902	5122	2744	1148	851	258	124	35	5	11602

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 11602.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	188	1120	659	69	5						2041
0.50-0.99		622	2973	697	120	8	1				4421
1.00-1.49			794	1222	337	42					2395
1.50-1.99			72	655	447	136	4				1314
2.00-2.49				269	216	268	14				767
2.50-2.99				17	337	127	56	8			545
3.00-3.49					36	296	36	23			391
3.50-3.99						182	99	32	3		316
4.00-4.49						22	108	57	12		199
4.50-4.99						1	23	54	17		95
5.00-5.49							2	37	26		65
5.50-5.99								5	33		38
6.00-6.49								1	7	3	11
6.50-6.99									2		2
7.00+										5	7
TOTAL	188	1742	4498	2929	1498	1082	343	217	102	8	11811

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.1 NO. OF CASES= 11811.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	162	746	252	5	1						1166
0.50-0.99		484	2151	263	13						2911
1.00-1.49			849	773	186	4					1812
1.50-1.99			81	515	390	89					1075
2.00-2.49				238	209	234	1				682
2.50-2.99				23	220	196	48				492
3.00-3.49				1	33	256	38	16			344
3.50-3.99					2	110	84	34	1		231
4.00-4.49						3	82	50	12		137
4.50-4.99							12	62	10		84
5.00-5.49								20	12	1	33
5.50-5.99								3	17		20
6.00-6.49									7		7
6.50-6.99										2	2
7.00+										1	1
TOTAL	162	1230	3333	1818	1054	892	265	190	49	4	8429

MEAN HS(M) = 1.4 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 5.1 NO. OF CASES= 8429.

STATION S54 46.80N 85.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

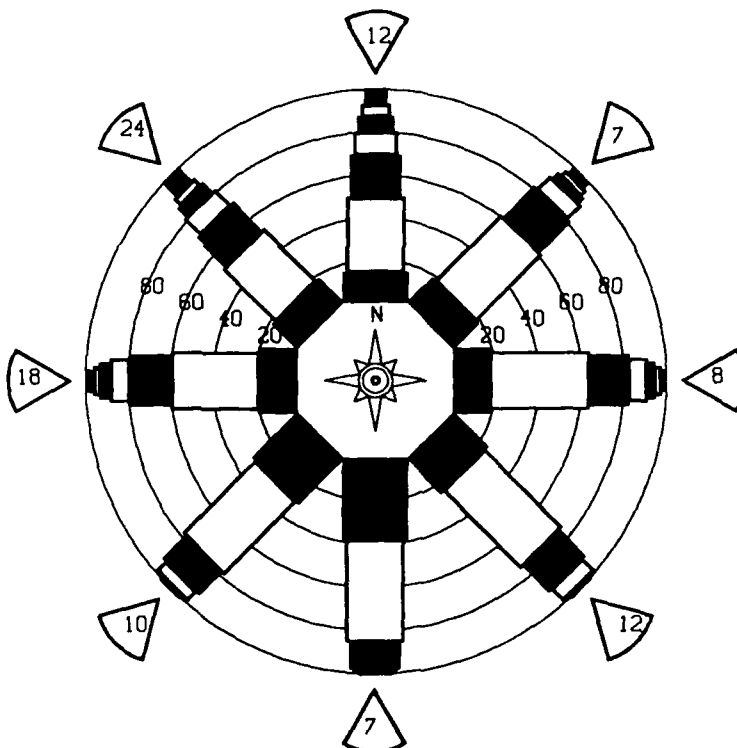
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	226	1292	459	21	1						1999
0.50-0.99		1107	2516	429	34						4188
1.00-1.49			778	866	167	15					1826
1.50-1.99			130	405	271	47	1				854
2.00-2.49			5	156	145	103	3				412
2.50-2.99				15	154	88	14	1			272
3.00-3.49					16	155	16	5			192
3.50-3.99						68	36	8			112
4.00-4.49						6	40	16	1		63
4.50-4.99							8	17	3		28
5.00-5.49								10	4		14
5.50-5.99								1	6		7
6.00-6.49									2		2
6.50-6.99											0
7.00+											0
TOTAL	226	2399	3988	1892	788	484	118	58	16	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.

STATION 54
46.80N, 85.78 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S54 (46.80N 85.78W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.9	1.2	1.1	1.2	0.8	0.7	0.6	0.6	0.8	1.1	1.3	1.3	1.0
1957	1.7	1.4	1.2	1.0	1.0	0.8	0.7	0.7	1.1	1.0	1.5	1.8	1.2
1958	1.3	2.1	1.0	1.1	1.0	0.8	0.6	0.6	0.8	1.0	1.9	1.4	1.1
1959	1.4	1.4	1.2	1.0	1.0	0.7	0.6	0.6	0.9	1.2	1.6	1.7	1.1
1960	1.4	1.5	1.0	1.0	0.9	0.6	0.6	0.6	0.7	1.1	1.5	1.9	1.0
1961	1.1	1.1	1.5	0.9	0.9	0.7	0.5	0.5	0.9	1.0	1.3	1.3	1.0
1962	1.6	1.2	0.8	1.0	0.6	0.5	0.5	0.5	0.8	0.9	1.1	1.5	0.9
1963	1.3	1.4	1.3	1.0	0.8	0.6	0.6	0.6	0.7	0.8	1.5	1.5	1.0
1964	1.6	1.5	1.6	1.2	1.0	0.7	0.6	0.8	1.0	1.1	1.3	1.3	1.1
1965	1.7	1.7	1.3	0.8	0.7	0.7	0.7	0.6	0.8	1.4	1.6	1.5	1.1
1966	1.7	1.5	1.8	1.1	1.1	0.7	0.8	0.7	1.1	1.5	1.7	1.7	1.3
1967	1.7	1.8	1.3	1.1	1.0	0.6	0.7	0.7	0.9	1.3	1.4	1.5	1.2
1968	1.4	2.5	1.5	1.1	0.9	0.6	0.7	0.7	0.8	1.2	1.8	1.7	1.2
1969	1.7	1.3	1.5	1.0	0.8	0.7	0.6	0.7	0.9	1.3	1.5	1.5	1.1
1970	1.5	1.7	1.3	1.2	0.9	0.6	0.7	0.7	1.0	1.1	1.6	1.5	1.2
1971	1.6	1.6	1.6	1.1	0.8	0.5	0.7	0.7	0.8	1.1	1.3	1.5	1.1
1972	1.8	1.4	1.5	0.9	0.6	0.7	0.7	0.7	1.1	1.5	1.5	1.5	1.1
1973	1.4	1.3	1.4	1.1	0.9	0.5	0.6	0.6	0.9	1.1	1.6	1.9	1.1
1974	1.2	1.1	1.3	1.0	0.7	0.6	0.6	0.5	0.8	1.1	1.2	1.2	0.9
1975	1.4	1.0	1.2	0.8	0.5	0.6	0.6	0.7	0.8	1.1	1.4	1.3	1.1
1976	1.7	1.5	1.7	1.1	0.8	0.6	0.6	0.7	0.9	0.9	1.1	1.5	1.1
1977	1.4	1.5	1.2	0.7	0.5	0.6	0.6	0.6	0.8	1.0	1.2	1.4	1.0
1978	1.7	1.0	1.0	0.9	0.6	0.6	0.3	0.8	0.8	1.1	1.4	1.4	1.1
1979	1.4	1.1	1.2	0.7	0.6	0.6	0.5	0.8	0.8	1.0	1.4	1.5	1.0
1980	1.3	0.9	1.3	0.9	0.6	0.6	0.4	0.5	0.9	1.2	1.3	1.3	0.9
1981	1.0	1.1	1.1	0.9	0.5	0.5	0.4	0.4	0.8	1.0	1.1	1.1	0.9
1982	1.8	1.1	1.5	1.1	0.5	0.5	0.3	0.5	0.9	1.0	1.1	1.2	0.9
1983	1.4	1.1	1.5	0.8	0.7	0.5	0.3	0.5	0.7	1.1	1.5	1.5	1.1
1984	1.2	1.2	1.4	0.9	0.7	0.6	0.5	0.7	0.8	0.9	1.1	1.5	1.1
1985	1.5	1.4	1.3	0.9	0.5	0.6	0.4	0.5	0.7	0.9	1.1	1.4	0.9
1986	1.4	0.9	1.3	1.1	0.6	0.6	0.4	0.5	0.8	0.8	1.2	1.3	0.9
1987	1.4	1.1	1.2	0.9	0.6	0.5	0.5	0.7	0.7	1.1	1.3	1.3	0.9
MEAN	1.5	1.4	1.3	1.0	0.8	0.6	0.6	0.6	0.9	1.1	1.4	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S54 (46.80N 85.78W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.3	4.5	3.7	4.0	2.6	2.4	1.9	2.2	3.5	5.1	4.1	4.3	
1957	5.1	5.1	4.3	3.7	2.2	3.3	4.0	2.2	4.6	3.8	5.5	6.0	
1958	5.2	5.7	4.1	4.6	3.3	3.5	2.2	2.3	3.8	3.3	5.3	4.3	
1959	3.9	4.2	5.4	3.3	3.3	3.9	1.7	1.6	3.9	4.0	4.8	6.3	
1960	4.6	4.5	3.5	3.3	3.6	2.0	2.7	2.1	5.4	5.0	4.2		
1961	5.8	3.9	5.5	3.6	2.8	2.6	2.0	2.7	4.0	4.5	5.3		
1962	4.7	4.4	3.4	3.3	3.2	1.4	1.1	2.3	3.3	4.8	4.3	5.1	
1963	3.7	5.7	4.7	5.5	3.4	3.7	2.2	2.5	3.3	3.1	5.8	4.4	
1964	5.6	4.6	5.1	3.3	3.8	3.4	1.1	2.2	4.7	3.8	5.9	3.8	
1965	5.0	5.5	4.8	3.3	1.7	3.2	2.2	2.2	3.3	5.6	6.0	5.3	
1966	6.4	5.5	5.7	3.3	4.6	3.6	2.2	2.2	6.0	5.3	5.3		
1967	6.3	6.3	4.9	3.5	3.8	3.5	3.3	3.3	3.3	3.3	4.3		
1968	4.1	7.0	4.8	4.2	2.7	2.2	2.7	2.2	3.3	3.9	6.1	5.9	
1969	5.2	5.0	4.4	3.3	2.3	2.1	2.5	2.8	3.3	3.7	4.4	5.7	
1970	4.3	5.0	4.0	4.8	2.4	2.4	2.4	2.8	4.1	4.4	6.7	5.2	
1971	5.6	6.3	5.9	4.0	2.6	2.3	2.4	2.4	3.3	3.9	4.2	5.4	
1972	7.2	5.3	4.3	3.7	2.2	2.4	2.4	2.8	4.5	8.0	4.4	6.8	
1973	4.5	3.3	4.9	3.0	3.1	1.6	1.8	1.9	4.2	5.6	5.2	3.5	
1974	5.7	5.4	3.8	3.3	2.2	2.2	1.8	1.7	3.5	3.3	4.3		
1975	4.4	4.4	3.7	3.3	1.1	2.4	1.6	2.0	2.4	4.4	1.1	4.7	
1976	6.0	5.6	5.6	3.2	4.2	2.1	1.8	1.1	3.7	3.8	3.3	4.3	
1977	5.2	5.0	5.9	3.1	2.0	2.6	2.9	2.9	4.4	3.4	3.3	5.5	
1978	6.4	3.5	5.1	4.1	2.9	1.8	1.0	1.1	2.4	3.3	3.9	3.9	
1979	4.1	3.9	4.8	4.4	2.3	1.8	1.6	3.6	2.3	3.4	4.2	4.7	
1980	5.8	3.1	6.0	3.3	2.6	1.9	1.3	3.7	5.2	5.5	5.5	4.8	
1981	2.8	3.9	4.6	3.4	2.5	2.8	1.1	1.3	5.0	4.7	1.1	3.1	
1982	7.4	4.3	6.5	5.7	2.1	2.2	2.1	1.8	4.0	4.6	5.5	3.9	
1983	4.2	4.5	4.5	2.2	2.7	2.0	1.8	1.7	2.4	4.0	4.3	5.0	
1984	5.1	4.2	5.2	3.1	3.2	2.1	1.4	1.5	2.1	3.9	6.1	5.5	
1985	4.1	4.3	4.6	4.6	3.1	3.3	1.2	1.9	2.6	3.4	3.8	5.5	
1986	5.3	3.0	5.1	3.5	3.1	2.0	1.1	2.3	3.9	3.9	3.5		
1987	4.8	5.7	4.3	4.4	2.9	2.0	1.4	3.4	2.7	4.6	4.7	4.2	

32 YR. STATISTICS FOR WIS STATION S54

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	8.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	311.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		72101703

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	65	317	83	113	8	.	.	.	.	.	465
0.50-0.99	.	240	1103	547	94	2	.	.	.	.	1464
1.00-1.49	.	.	373	375	207	34	.	.	.	.	1016
1.50-1.99	.	.	25	130	145	108	3	.	.	.	641
2.00-2.49	.	.	.	13	208	67	18	.	.	.	386
2.50-2.99	19	179	10	3	.	.	306
3.00-3.49	119	13	6	.	.	211
3.50-3.99	22	43	4	.	.	138
4.00-4.49	17	5	.	.	69
4.50-4.99	2	11	.	.	22
5.00-5.49	1	1	.	13
5.50-5.99	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	65	557	1584	1178	681	531	106	30	1	0	

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 5.2 NO. OF CASES= 4441.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	63	300	73	2	.	.	.	.	.	.	438
0.50-0.99	.	254	974	99	5	.	.	.	.	.	1332
1.00-1.49	.	.	295	434	63	2	.	.	.	.	794
1.50-1.99	.	.	20	244	101	21	.	.	.	.	386
2.00-2.49	.	.	.	69	74	31	1	.	.	.	175
2.50-2.99	.	.	.	2	124	28	6	.	.	.	160
3.00-3.49	6	143	5	.	.	.	154
3.50-3.99	50	3	1	.	.	54
4.00-4.49	4	12	.	.	.	16
4.50-4.99	4	.	.	.	4
5.00-5.49	2	2	.	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	63	554	1362	850	373	279	33	3	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 3300.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	90	394	90	3	.	.	.	.	.	.	577
0.50-0.99	.	260	1189	81	7	.	.	.	.	.	1537
1.00-1.49	.	.	337	433	37	2	1	.	.	.	810
1.50-1.99	.	.	7	233	66	13	.	.	.	.	319
2.00-2.49	.	.	.	57	63	10	1	.	.	.	131
2.50-2.99	93	34	.	.	.	.	127
3.00-3.49	2	84	.	.	.	.	86
3.50-3.99	29	.	.	.	.	29
4.00-4.49	1	5	.	.	.	6
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	90	654	1623	807	268	173	7	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 3398.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	48	449	42	2	1	.	.	.	.	.	541
0.50-0.99	.	337	1375	65	1	.	.	.	.	.	1778
1.00-1.49	.	.	373	356	23	3	.	.	.	.	755
1.50-1.99	.	.	7	229	51	4	.	.	.	.	291
2.00-2.49	.	.	.	40	69	3	.	.	.	.	112
2.50-2.99	95	7	.	.	.	.	102
3.00-3.49	6	37	.	.	.	.	43
3.50-3.99	8	.	.	.	.	8
4.00-4.49	2	.	.	.	.	2
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	48	786	1797	692	245	64	1	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 3406.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	68	703	70	3	6	.	.	.	.	.	844
0.50-0.99	.	559	1995	63	17	.	.	.	.	.	2623
1.00-1.49	.	.	468	475	1	.	.	.	.	.	961
1.50-1.99	.	.	18	345	73	2	.	.	.	.	438
2.00-2.49	.	.	.	94	105	2	.	.	.	.	201
2.50-2.99	.	.	.	2	182	.	.	.	.	.	184
3.00-3.49	14	75	.	.	.	.	89
3.50-3.99	14	.	.	.	.	14
4.00-4.49	1	2	.	.	.	3
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	68	1262	2551	982	397	95	3	0	0	0	5021.

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 5021.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	96	1017	81	2	.	.	.	.	.	.	1196
0.50-0.99	.	801	1949	101	3	.	.	.	.	.	2854
1.00-1.49	.	.	614	589	6	.	.	.	.	.	1219
1.50-1.99	.	.	29	393	177	1	.	.	.	.	600
2.00-2.49	.	.	.	90	144	23	.	.	.	.	257
2.50-2.99	.	.	.	3	89	16	.	.	.	.	108
3.00-3.49	6	31	.	.	.	.	37
3.50-3.99	1	11	.	.	.	.	12
4.00-4.49	1	1	.	.	.	2
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	96	1818	2673	1188	426	83	2	0	0	0	5888.

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 5888.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	155	1250	154	5	.	.	.	.	.	.	1564
0.50-0.99	.	1699	2338	218	5	1	.	.	.	.	4261
1.00-1.49	.	.	671	860	47	.	.	.	.	.	1578
1.50-1.99	.	.	162	216	333	6	.	.	.	.	717
2.00-2.49	.	.	8	22	84	35	.	.	.	.	149
2.50-2.99	.	.	.	2	1	3	1	.	.	.	7
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	155	2949	3333	1323	470	46	1	0	0	0	7747.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 7747.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	158	961	128	11	.	.	.	.	.	.	1258
0.50-0.99	.	1134	1040	161	3	1	.	.	.	.	2339
1.00-1.49	.	.	234	255	33	4	.	.	.	.	527
1.50-1.99	.	.	69	7	42	4	.	.	.	.	122
2.00-2.49	.	.	3	1	.	2	.	.	.	.	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	158	2096	1474	435	78	11	0	0	0	0	3983.

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3983.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	166	724	97	7	4	1	.	.	.	.	994
0.50-0.99	.	693	390	60	16	1	.	.	.	.	1148
1.00-1.49	.	.	224	53	6	3	.	.	.	.	294
1.50-1.99	.	.	29	2	.	.	.	.	.	.	40
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	166	1417	741	122	26	5	0	0	0	0	2322

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 2322.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	146	658	68	5	1	.	.	.	.	.	878
0.50-0.99	.	756	329	75	9	.	.	.	.	.	1169
1.00-1.49	.	.	253	36	11	2	.	.	.	.	302
1.50-1.99	.	.	49	6	5	2	.	.	.	.	62
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	146	1414	699	124	26	4	0	0	0	0	2263

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 2263.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	158	722	263	12	43	2	.	.	.	.	1155
0.50-0.99	.	1138	476	245	101	17	.	.	.	.	1904
1.00-1.49	.	.	355	40	7	8	1	.	.	.	513
1.50-1.99	.	.	209	10	1	1	.	.	.	.	235
2.00-2.49	.	.	4	19	.	1	.	.	.	.	25
2.50-2.99	.	.	.	5	.	1	.	.	.	.	6
3.00-3.49	.	.	.	1	.	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	158	1860	1307	332	151	28	3	0	0	0	3600

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3600.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	127	673	516	47	129	1	.	.	.	.	1363
0.50-0.99	.	1109	1045	783	273	35	1	.	.	.	3067
1.00-1.49	.	.	355	364	122	29	.	.	.	.	1028
1.50-1.99	.	.	207	64	28	6	1	.	.	.	422
2.00-2.49	.	.	18	40	6	2	.	.	.	.	123
2.50-2.99	.	.	.	7	.	1	.	.	.	.	20
3.00-3.49	.	.	.	1	.	1	.	.	.	.	7
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	127	1782	2141	1308	558	111	6	0	0	0	5651

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5651.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	217	980	542	7							1746
0.50-0.99		724	2658	471	18	1	3				3875
1.00-1.49		1	710	1027	122	8	1		1		1870
1.50-1.99			105	512	300	19					936
2.00-2.49				203	185	93	1	1			483
2.50-2.99				9	183	103	3				298
3.00-3.49					12	142	10	1			165
3.50-3.99					1	70	34	2			107
4.00-4.49						1	42	7			50
4.50-4.99							3	14			17
5.00-5.49								6			6
5.50-5.99								1	1		2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	217	1705	4015	2229	821	437	97	32	2	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 8950.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	270	1239	727	43	13	2					2294
0.50-0.99		869	3604	643	96	18	3		1		5234
1.00-1.49		1	967	1240	233	34	2	1	4		2482
1.50-1.99			119	680	356	85	1	1			1242
2.00-2.49				273	224	155	10	1	1		665
2.50-2.99				20	312	95	24	2		1	454
3.00-3.49				1	48	272	20	5			346
3.50-3.99					1	166	62	12	1		242
4.00-4.49						25	127	17	2		171
4.50-4.99							27	52	4		83
5.00-5.49							1	48	3		52
5.50-5.99								10	19		29
6.00-6.49									9	1	10
6.50-6.99									9	1	10
7.00+										1	1
TOTAL	270	2109	5418	2900	1283	852	277	149	53	4	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 12471.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	211	1157	547	48	5						1968
0.50-0.99		979	3481	747	102	9					5318
1.00-1.49		1	1155	1250	342	43	3				2794
1.50-1.99			77	853	408	136	4				1478
2.00-2.49			1	375	257	238	14				885
2.50-2.99				16	465	117	47	6			651
3.00-3.49					63	411	24	23			323
3.50-3.99					1	220	165	1	2		331
4.00-4.49						25	116	49	13		203
4.50-4.99						3	27	63	13		106
5.00-5.49							2	35	13		50
5.50-5.99								12	40	1	53
6.00-6.49									19	3	22
6.50-6.99									3	7	30
7.00+											10
TOTAL	211	2137	5261	3289	1643	1202	322	212	107	11	

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 5.1 NO. OF CASES= 13483.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

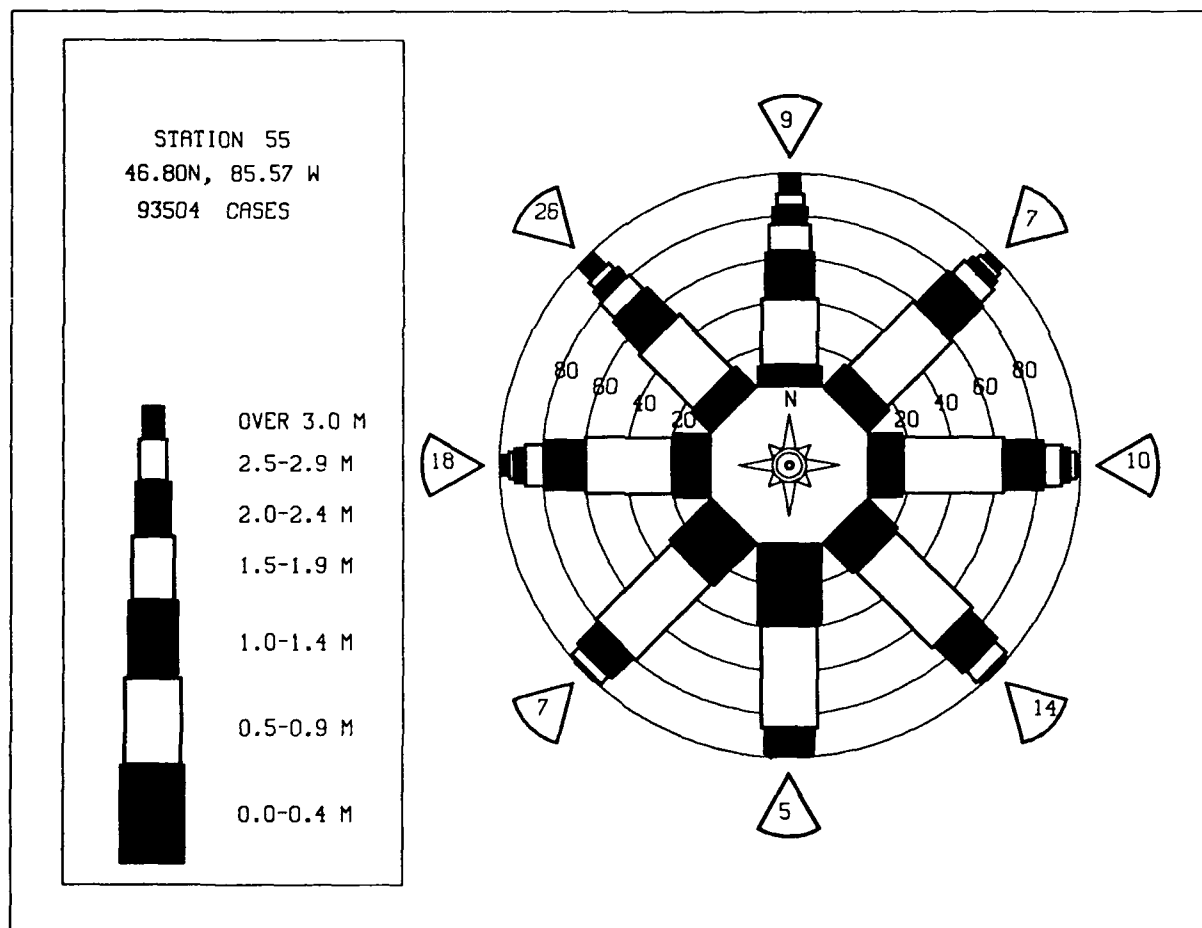
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	84	505	94	5							688
0.50-0.99		457	1929	183	3	1					2573
1.00-1.49		1	849	714	121	3					1588
1.50-1.99			52	597	326	85					1060
2.00-2.49			1	282	228	190	2				703
2.50-2.99				21	325	118	43	6			513
3.00-3.49					43	250	36	19			348
3.50-3.99						168	60	22			250
4.00-4.49						23	63	41	6		133
4.50-4.99						2	20	38	11		71
5.00-5.49							1	16	19	1	37
5.50-5.99								1	10	1	12
6.00-6.49									6		6
6.50-6.99									1		1
7.00+											2
TOTAL	84	963	2925	1802	1046	840	225	143	53	4	

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 5.2 NO. OF CASES= 7580.

STATION S55 46.80N 85.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	212	1205	358	20	2						1797
0.50-0.99		1201	2588	411	44	3					4247
1.00-1.49			823	869	154	16					1862
1.50-1.99			119	477	258	45					899
2.00-2.49			3	170	161	93	3				430
2.50-2.99				10	208	59	14	1			292
3.00-3.49					22	163	11	5			201
3.50-3.99						86	25	6			117
4.00-4.49						10	41	11	2		64
4.50-4.99							10	17	2		29
5.00-5.49								11	3		14
5.50-5.99								2	7		9
6.00-6.49									3		3
6.50-6.99									1		1
7.00+										1	1
TOTAL	212	2406	3891	1957	849	475	104	53	18	1	93504

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S55 (46.80N 85.57W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.0	1.3	1.2	1.2	0.9	0.7	0.7	0.6	0.8	1.1	1.4	1.4	1.0
1957	1.7	1.4	1.3	1.0	1.0	0.8	0.7	0.7	1.1	1.0	1.6	1.6	1.2
1958	1.3	2.1	1.1	1.2	1.0	0.9	0.6	0.7	0.9	1.1	1.9	1.4	1.2
1959	1.5	1.5	1.3	1.1	1.1	0.8	0.7	0.7	1.0	1.3	1.7	1.7	1.2
1960	1.4	1.5	1.0	0.9	0.9	0.6	0.6	0.6	0.8	1.1	1.6	1.3	1.0
1961	1.1	1.1	1.5	0.9	0.9	0.7	0.5	0.6	1.0	1.1	1.3	1.4	1.0
1962	1.6	1.2	0.8	1.0	0.7	0.5	0.5	0.6	0.9	0.9	1.1	1.5	1.0
1963	1.3	1.4	1.3	1.1	0.8	0.6	0.6	0.7	0.7	0.8	1.5	1.5	1.0
1964	1.7	1.5	1.6	1.2	1.0	0.7	0.6	0.9	1.1	1.1	1.4	1.3	1.2
1965	1.8	1.8	1.3	0.9	0.8	0.8	0.7	0.7	0.9	1.1	1.6	1.5	1.2
1966	1.8	1.5	1.8	1.2	1.1	0.7	0.8	0.8	1.2	1.5	1.8	1.7	1.3
1967	1.8	1.8	1.4	1.1	1.0	0.7	0.7	0.7	0.9	1.3	1.4	1.6	1.1
1968	1.5	2.5	1.5	1.2	0.9	0.7	0.7	0.8	0.8	1.1	1.8	1.8	1.3
1969	1.8	1.3	1.5	1.0	0.8	0.7	0.6	0.8	0.9	1.1	1.3	1.5	1.1
1970	1.5	1.7	1.4	1.1	0.9	0.7	0.7	0.7	1.1	1.2	1.6	1.5	1.2
1971	1.7	1.6	1.7	1.2	0.9	0.6	0.7	0.7	0.8	1.1	1.4	1.6	1.2
1972	1.9	1.5	1.5	1.0	0.7	0.7	0.7	0.7	1.2	1.5	1.2	1.5	1.2
1973	1.5	1.3	1.4	1.1	0.6	0.6	0.6	0.6	1.0	1.1	1.7	1.3	1.1
1974	1.2	1.1	1.4	1.0	0.8	0.7	0.6	0.6	0.8	1.1	1.2	1.1	1.0
1975	1.4	1.1	1.3	0.9	0.5	0.6	0.6	0.7	0.8	1.1	1.4	1.3	1.0
1976	1.7	1.6	1.7	1.1	0.9	0.6	0.6	0.7	1.0	1.0	1.6	1.5	1.2
1977	1.4	1.6	1.2	0.8	0.6	0.6	0.6	0.6	0.8	1.1	1.2	1.4	1.0
1978	1.6	1.0	1.0	0.0	0.6	0.6	0.5	0.8	0.8	1.1	1.4	1.4	1.0
1979	1.4	1.1	1.2	0.8	0.6	0.6	0.6	0.6	0.8	0.9	1.4	1.6	1.0
1980	1.4	0.9	1.3	0.9	0.6	0.6	0.4	0.6	0.9	1.2	1.0	1.4	0.9
1981	1.0	1.1	1.1	0.9	0.6	0.5	0.4	0.4	0.9	1.1	1.2	1.1	0.9
1982	1.8	1.1	1.5	1.1	0.5	0.5	0.5	0.5	0.9	1.0	1.2	1.1	1.0
1983	1.4	1.1	1.5	0.8	0.8	0.8	0.5	0.5	0.7	1.0	1.6	1.1	1.0
1984	1.2	1.3	1.4	0.8	0.8	0.5	0.5	0.4	0.8	0.9	1.1	1.5	1.0
1985	1.5	1.3	1.3	0.9	0.9	0.6	0.6	0.5	0.7	0.8	1.1	1.4	0.9
1986	1.4	0.9	1.3	1.1	0.6	0.6	0.6	0.5	0.8	0.8	1.2	1.3	0.9
1987	1.4	1.2	1.3	1.0	0.7	0.6	0.6	0.7	0.7	1.1	1.4	1.3	1.0
MEAN	1.5	1.4	1.3	1.0	0.8	0.6	0.6	0.6	0.9	1.1	1.4	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S55 (46.80N 85.57W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.5	4.8	3.8	4.3	2.8	2.5	2.1	2.3	3.7	5.2	4.2	4.4	
1957	5.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1958	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1959	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1960	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1961	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1962	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1963	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1964	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1965	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1966	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1967	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1968	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1969	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1970	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1971	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1972	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1973	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1974	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1975	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1976	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1977	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1978	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1979	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1980	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1981	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1982	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1983	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1984	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1985	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1986	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1987	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	

32 YR. STATISTICS FOR WIS STATION S55

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	310.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	72101703

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	50	242	49	1	5	.	.	.	.	.	342
0.50-0.99	.	233	906	89	5	.	.	.	.	.	1233
1.00-1.49	.	.	371	489	78	.	.	.	.	.	938
1.50-1.99	.	.	18	373	188	52	.	.	.	.	631
2.00-2.49	.	.	1	151	134	113	5	.	.	.	404
2.50-2.99	.	.	.	8	216	58	14	1	.	.	297
3.00-3.49	14	132	10	7	.	.	163
3.50-3.99	124	12	5	1	.	146
4.00-4.49	4	39	3	.	.	46
4.50-4.99	10	7	.	.	17
5.00-5.49	1	4	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	50	475	1345	1111	639	483	91	27	1	0	3964

MEAN HS(M) = 1.5 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 5.3 NO. OF CASES= 3964.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	50	288	57	86	8	.	.	.	.	.	395
0.50-0.99	.	289	869	86	8	.	.	.	.	.	1252
1.00-1.49	.	.	303	458	62	3	.	.	.	.	826
1.50-1.99	.	.	12	269	90	16	.	.	.	.	387
2.00-2.49	.	.	.	87	74	36	4	.	.	.	201
2.50-2.99	.	.	.	2	152	25	8	.	.	.	187
3.00-3.49	13	82	1	.	.	.	96
3.50-3.99	27	.	.	.	.	27
4.00-4.49	3	9	.	.	.	12
4.50-4.99	3	1	.	.	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	50	577	1241	902	399	192	25	1	0	0	3182

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 3182.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	81	303	47	79	3	.	.	.	.	.	431
0.50-0.99	.	271	1058	79	3	.	.	.	.	.	1411
1.00-1.49	.	.	337	405	40	2	.	.	.	.	784
1.50-1.99	.	.	13	276	39	13	.	.	.	.	341
2.00-2.49	.	.	.	96	65	13	5	.	.	.	179
2.50-2.99	.	.	.	2	137	6	1	1	.	.	147
3.00-3.49	9	42	.	.	.	.	51
3.50-3.99	10	.	.	.	.	10
4.00-4.49	0
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	81	574	1455	858	293	86	7	1	0	0	3150

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 3150.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	47	440	41	2	6	.	.	.	.	.	530
0.50-0.99	.	397	1542	86	6	.	.	.	.	.	2031
1.00-1.49	.	.	463	229	34	.	.	.	.	.	726
1.50-1.99	.	.	10	286	8	7	.	.	.	.	311
2.00-2.49	.	.	.	99	50	4	1	.	.	.	154
2.50-2.99	.	.	.	1	79	1	.	.	.	.	81
3.00-3.49	9	16	.	.	.	.	25
3.50-3.99	2	.	.	.	.	2
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	47	837	2056	703	186	31	1	0	0	0	3619

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 3619.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	74	885	40	2							1001
0.50-0.99		767	2406	68	3						3244
1.00-1.49			749	255	24	1					1029
1.50-1.99			25	417	8	7					457
2.00-2.49				203	89						292
2.50-2.99					182						182
3.00-3.49					23	10					33
3.50-3.99						5					5
4.00-4.49						2					2
4.50-4.99						1					1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	74	1652	3220	945	329	26	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 5851.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	115	1053	43	4							1215
0.50-0.99		1067	2383	52	7						3510
1.00-1.49			1165	652	12						1829
1.50-1.99			50	735	103						888
2.00-2.49				227	340	11					573
2.50-2.99					137	40					184
3.00-3.49					24	17					41
3.50-3.99						6					6
4.00-4.49						3					3
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	115	2120	3641	1672	623	78	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 7725.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	139	1014	82	4							1239
0.50-0.99		1622	2487	93	5						4207
1.00-1.49			901	931	18	4					1854
1.50-1.99			70	437	229	3					739
2.00-2.49			5	25	217	23					270
2.50-2.99				1	1	24					26
3.00-3.49						2					2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	139	2636	3545	1491	470	56	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 7804.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	124	803	105	7	1						1040
0.50-0.99		1004	762	65	3	1					1835
1.00-1.49			264	161	8	2					435
1.50-1.99			50	21	23	1					95
2.00-2.49			3		4	1					8
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	124	1807	1184	254	39	5	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3197.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	115	533	55	9	1	.	.	.	.	.	713
0.50-0.99	.	654	336	41	4	.	.	.	.	.	1035
1.00-1.49	.	.	207	28	8	3	.	.	.	.	246
1.50-1.99	.	.	40	6	1	1	.	.	.	.	48
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	115	1187	638	84	14	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 1917.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	101	515	54	2	1	.	.	.	.	.	672
0.50-0.99	.	679	296	56	11	.	.	.	.	.	1042
1.00-1.49	.	.	237	18	18	6	.	.	.	.	279
1.50-1.99	.	.	56	6	1	3	.	.	.	.	66
2.00-2.49	.	.	.	1	1	1	.	.	.	.	3
2.50-2.99	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	101	1194	643	84	31	9	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 1935.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	145	547	108	5	1	.	.	.	.	.	806
0.50-0.99	.	1079	411	126	49	1	.	.	.	.	1666
1.00-1.49	.	.	381	25	42	18	1	.	.	.	467
1.50-1.99	.	.	188	21	4	4	.	.	.	.	213
2.00-2.49	.	.	.	18	1	2	1	.	.	.	22
2.50-2.99	.	.	.	3	.	.	.	.	.	.	4
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	145	1626	1088	198	94	25	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 2979.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	113	559	334	52	.	.	.	.	.	.	1058
0.50-0.99	.	1279	813	673	172	5	.	1	.	.	2943
1.00-1.49	.	.	422	190	196	21	.	.	.	.	829
1.50-1.99	.	.	254	62	62	28	.	.	.	.	406
2.00-2.49	.	.	17	51	9	16	.	1	.	.	94
2.50-2.99	.	.	.	10	6	2	.	.	.	.	20
3.00-3.49	3	2	.	.	.	5
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	113	1838	1840	1038	445	76	5	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 5019.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	190	792	451	10	1	2	1	1	.	.	1444
0.50-0.99	.	938	2490	625	14	2	1	.	.	.	4071
1.00-1.49	.	.	758	1002	165	10	2	.	1	.	1938
1.50-1.99	.	.	116	504	339	27	1	.	.	.	987
2.00-2.49	.	.	4	214	180	90	4	.	.	.	492
2.50-2.99	.	.	.	19	231	106	10	.	.	.	366
3.00-3.49	.	.	.	1	22	163	12	2	.	.	200
3.50-3.99	2	70	49	4	.	.	125
4.00-4.49	6	49	9	.	.	64
4.50-4.99	8	19	.	.	27
5.00-5.49	10	.	.	10
5.50-5.99	1	2	.	3
6.00-6.49	2	.	0
6.50-6.99	0
7.00+	0
TOTAL	190	1730	3819	2375	954	474	136	46	5	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 9117.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	260	1099	536	42	8	3	.	.	.	.	1948
0.50-0.99	.	1178	3731	676	108	19	3	1	1	.	5717
1.00-1.49	.	.	1	1159	1255	270	44	2	3	.	2736
1.50-1.99	.	.	.	139	656	364	91	2	1	1	1255
2.00-2.49	.	.	.	1	378	213	161	5	2	1	761
2.50-2.99	28	359	90	6	.	.	515
3.00-3.49	60	276	24	10	1	371
3.50-3.99	1	191	63	11	.	266
4.00-4.49	37	112	19	1	.	169
4.50-4.99	56	64	4	.	124
5.00-5.49	1	54	3	.	58
5.50-5.99	19	17	.	36
6.00-6.49	4	19	1	24
6.50-6.99	10	1	11
7.00+	3	5	8
TOTAL	260	2278	5566	3035	1383	912	300	191	65	9	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.9 NO. OF CASES= 13115.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	162	902	335	38	1	.	.	.	.	.	1438
0.50-0.99	.	950	3982	719	88	9	.	.	.	.	5748
1.00-1.49	.	.	1656	1289	326	37	2	.	.	.	3310
1.50-1.99	.	.	131	1215	393	115	2	.	.	.	1856
2.00-2.49	.	.	2	544	329	206	9	1	.	.	1091
2.50-2.99	.	.	.	20	596	124	37	7	.	.	784
3.00-3.49	.	.	.	1	70	459	23	22	2	.	577
3.50-3.99	2	303	73	19	2	.	399
4.00-4.49	48	161	44	9	.	262
4.50-4.99	1	44	67	19	.	131
5.00-5.49	2	37	10	.	49
5.50-5.99	14	41	1	56
6.00-6.49	3	27	2	32
6.50-6.99	4	3	7
7.00+	2	8	10
TOTAL	162	1852	6106	3826	1805	1302	353	214	116	14	

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 5.1 NO. OF CASES= 14754.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

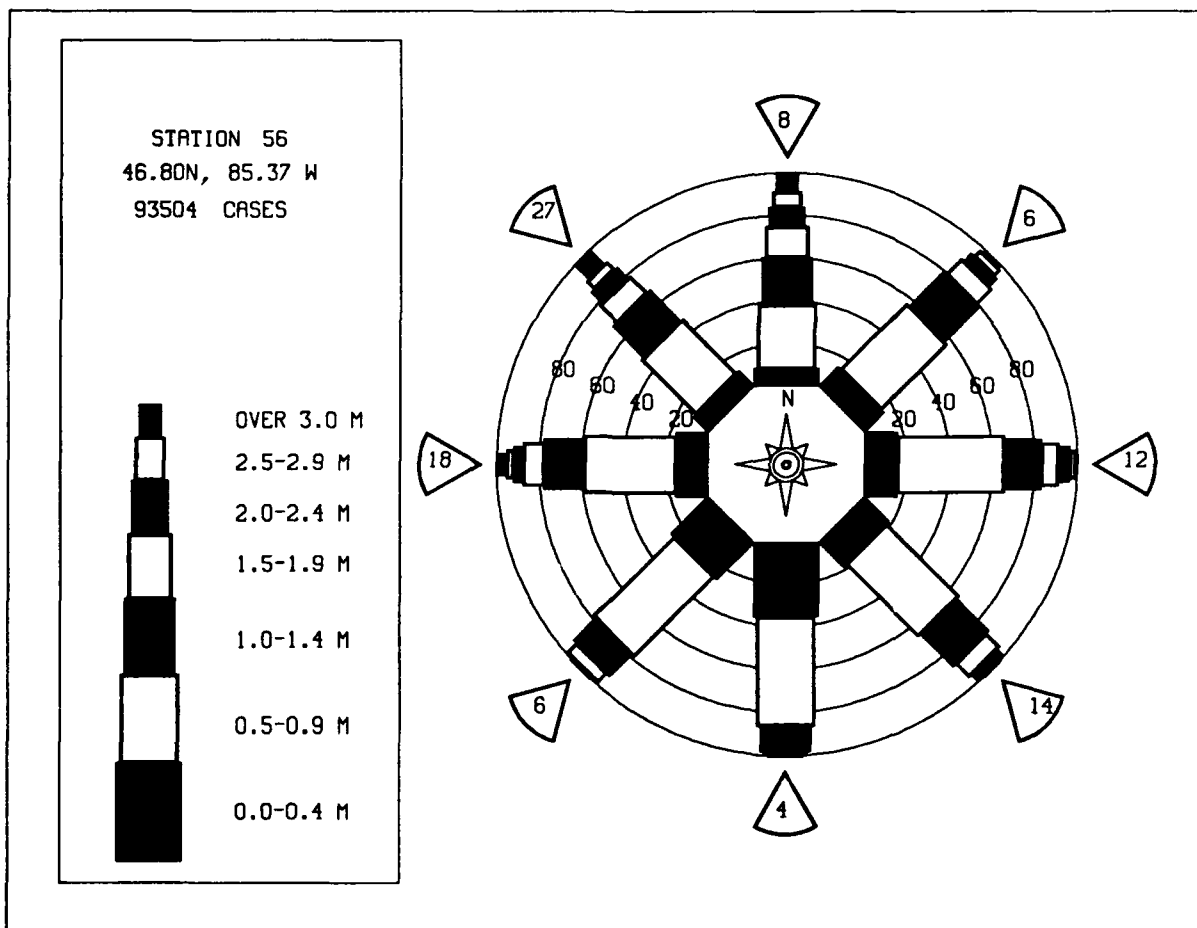
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	51	296	45	118	5	.	.	.	.	.	392
0.50-0.99	.	287	1311	591	84	8	.	.	.	.	1721
1.00-1.49	.	.	737	681	223	50	.	.	.	.	1420
1.50-1.99	.	.	52	332	242	141	.	.	.	.	1006
2.00-2.49	.	.	.	12	341	106	37	6	.	.	719
2.50-2.99	49	266	20	16	.	.	502
3.00-3.49	185	45	14	.	.	351
3.50-3.99	26	53	35	.	.	244
4.00-4.49	1	20	26	4	.	118
4.50-4.99	11	1	1	59
5.00-5.49	21	10	.	33
5.50-5.99	1	.	1	9
6.00-6.49	6	2	8
6.50-6.99	1	1
7.00+	1
TOTAL	51	583	2145	1734	944	783	181	119	38	6	

MEAN HS(M) = 1.6 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 5.4 NO. OF CASES= 6176.

STATION S56 46.80N 85.37W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	182	1027	239	18	1						1467
0.50-0.99		1270	2579	366	49	3					4267
1.00-1.49			1011	798	139	16					1964
1.50-1.99			123	597	207	42					969
2.00-2.49			3	242	195	82	4				526
2.50-2.99				11	244	58	14	2			329
3.00-3.49					30	147	9	5			191
3.50-3.99						92	24	5			121
4.00-4.49						13	42	11	1		67
4.50-4.99							14	18	3		35
5.00-5.49								12	2		14
5.50-5.99								3	6		9
6.00-6.49									5		5
6.50-6.99									1		1
7.00+										1	1
TOTAL	182	2297	3955	2032	865	453	107	56	18	1	93504

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S56 (46.80N 85.37W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.0	1.3	1.2	1.3	1.0	0.8	0.7	0.7	0.9	1.2	1.4	1.4	1.1
1957	1.7	1.5	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.1	1.7	1.1	1.2
1958	1.4	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.6	1.6	1.4	1.2	1.2	0.8	0.7	0.7	1.0	1.4	1.8	1.8	1.3
1960	1.1	1.1	1.1	1.1	1.1	0.7	0.6	0.7	1.1	1.2	1.6	1.4	1.1
1961	1.2	1.3	1.6	1.0	1.0	0.8	0.6	0.7	1.1	1.1	1.4	1.5	1.1
1962	1.7	1.1	1.3	1.1	1.1	0.7	0.6	0.6	1.1	1.1	1.1	1.6	1.0
1963	1.3	1.4	1.3	1.2	0.8	0.6	0.7	0.7	0.7	0.9	1.5	1.5	1.1
1964	1.1	1.1	1.3	1.1	1.2	0.8	0.6	0.7	1.1	1.2	1.5	1.4	1.1
1965	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.6	1.7	1.5	1.1
1966	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1967	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1968	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1969	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1970	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1971	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1972	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1973	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1974	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1975	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1976	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1977	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1978	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1979	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1980	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1981	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1982	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1983	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1984	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1985	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1986	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
1987	1.1	1.1	1.3	1.1	1.1	0.9	0.8	0.8	1.1	1.3	1.3	1.7	1.1
MEAN	1.5	1.4	1.4	1.1	0.9	0.7	0.6	0.7	0.9	1.2	1.5	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S56 (46.80N 85.37W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.6	4.9	3.9	4.5	3.1	2.8	2.3	2.5	3.8	5.4	4.4	4.6	
1957	4.9	5.2	4.4	3.5	3.2	3.2	3.1	2.8	5.0	4.3	5.9	6.0	
1958	5.5	5.8	4.4	5.0	3.2	3.3	2.2	2.7	3.9	3.7	5.8	4.8	
1959	4.2	4.6	5.5	3.3	4.4	3.5	2.2	2.1	4.1	5.2	5.4	7.2	
1960	4.8	3.4	3.4	3.2	3.2	2.2	2.7	2.1	3.9	5.6	5.3	4.1	
1961	5.7	4.2	5.8	3.3	3.6	3.1	2.6	3.1	3.3	4.2	4.9	6.6	
1962	5.0	4.1	4.3	3.3	3.0	1.5	2.3	1.8	3.5	4.8	4.4	5.7	
1963	4.3	3.6	2.2	3.3	3.6	2.2	2.5	2.3	2.6	3.5	6.6	4.8	
1964	6.4	4.4	3.3	3.3	3.9	3.6	2.4	3.7	4.1	4.1	6.8	4.5	
1965	5.9	3.9	4.4	3.3	3.0	2.6	2.9	2.5	3.3	6.3	6.9	5.5	
1966	7.7	3.3	3.3	3.3	3.8	3.5	2.9	3.5	5.5	6.6	5.1	5.5	
1967	6.7	3.6	3.3	3.3	3.6	3.6	3.0	2.2	3.7	4.2	4.8	3.9	
1968	4.5	3.6	3.3	3.3	2.7	2.1	3.1	2.2	4.4	4.2	6.0	5.5	
1969	4.4	3.3	3.3	3.3	2.5	2.0	2.5	3.4	3.4	3.6	4.8	5.5	
1970	4.4	3.3	3.3	3.3	2.5	2.4	2.1	2.7	4.3	4.4	7.0	6.8	
1971	5.2	3.6	3.3	3.3	3.5	2.8	2.8	2.8	3.7	4.3	4.6	6.6	
1972	5.7	3.3	3.3	3.3	3.7	2.2	2.4	2.4	4.6	8.2	4.4	4.4	
1973	4.4	3.3	3.3	3.3	3.6	3.6	2.4	3.3	4.7	6.0	5.7	3.7	
1974	6.3	3.3	3.3	3.3	3.2	2.2	1.6	1.8	3.2	3.9	3.8	4.4	
1975	4.4	3.3	3.3	3.3	3.4	2.0	2.6	2.9	3.3	4.4	6.1	5.5	
1976	4.4	3.3	3.3	3.3	3.1	4.7	2.8	3.4	4.4	5.1	5.8	6.6	
1977	5.0	3.3	3.3	3.3	3.0	2.6	2.5	3.1	4.1	3.7	4.9	3.3	
1978	4.4	3.3	3.3	3.3	3.1	2.1	1.7	3.0	2.5	3.6	4.6	4.4	
1979	4.4	3.3	3.3	3.3	3.1	2.2	2.2	2.0	4.0	2.3	3.0	4.4	
1980	4.4	3.3	3.3	3.3	3.1	2.7	1.9	1.2	1.5	5.6	6.3	5.1	
1981	3.3	3.3	3.3	3.3	2.1	2.1	1.2	1.4	5.8	5.0	2.2	3.3	
1982	3.3	3.3	3.3	3.3	2.1	2.2	2.1	2.4	4.6	4.8	4.8	4.4	
1983	4.4	3.3	3.3	3.3	2.1	2.6	1.9	1.8	2.9	3.8	3.3	4.4	
1984	4.4	3.3	3.3	3.3	3.4	3.4	1.7	1.7	2.9	3.8	3.3	4.4	
1985	4.4	3.3	3.3	3.3	3.4	3.4	1.4	1.4	3.0	4.0	3.8	3.3	
1986	4.4	3.3	3.3	3.3	3.4	3.4	2.4	2.4	3.7	4.2	3.7	4.4	
1987	5.2	5.0	4.6	5.0	3.0	2.8	2.4	3.9	3.3	4.5	5.7	4.2	

32 YR. STATISTICS FOR WIS STATION S56

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	309.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	72101703

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	27	244	23	1	6	.	.	.	.	.	295
0.50-0.99	.	252	840	55	63	.	.	.	.	.	1153
1.00-1.49	.	.	432	423	63	4	.	.	.	.	822
1.50-1.99	.	.	44	378	208	49	.	.	.	.	679
2.00-2.49	.	.	2	139	135	105	7	.	.	.	388
2.50-2.99	.	.	.	9	210	52	17	1	.	.	289
3.00-3.49	21	149	7	5	.	.	182
3.50-3.99	84	25	3	1	.	113
4.00-4.49	5	40	2	.	.	47
4.50-4.99	8	8	.	.	16
5.00-5.49	1	1	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	27	496	1341	1005	643	448	104	20	2	0	

MEAN HS(M) = 1.5 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 5.2 NO. OF CASES= 3837.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	41	293	36	2	7	.	.	.	.	.	372
0.50-0.99	.	311	854	78	7	.	.	.	.	.	1250
1.00-1.49	.	.	424	328	50	2	.	.	.	.	804
1.50-1.99	.	.	26	255	85	22	2	.	.	.	390
2.00-2.49	.	.	.	74	79	40	8	.	.	.	201
2.50-2.99	.	.	.	13	88	11	5	1	.	.	118
3.00-3.49	18	31	.	.	.	.	49
3.50-3.99	6	1	.	.	.	7
4.00-4.49	8	.	.	.	9
4.50-4.99	3	1	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	41	604	1340	750	327	112	24	4	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 3007.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	54	245	29	1	1	.	.	.	.	.	329
0.50-0.99	.	256	936	60	1	.	.	.	.	.	1253
1.00-1.49	.	.	591	182	38	3	1	.	.	.	815
1.50-1.99	.	.	42	251	38	16	.	.	.	.	347
2.00-2.49	.	.	.	136	51	14	3	1	.	.	205
2.50-2.99	.	.	.	32	23	10	2	.	.	.	67
3.00-3.49	2	3	.	.	.	.	5
3.50-3.99	0
4.00-4.49	1	.	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	54	501	1598	662	153	47	6	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 2838.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	49	457	31	1	2	.	.	.	.	.	538
0.50-0.99	.	479	1500	84	2	.	.	.	.	.	2065
1.00-1.49	.	.	876	90	25	1	.	.	.	.	992
1.50-1.99	.	.	64	282	7	11	2	.	.	.	366
2.00-2.49	.	.	.	190	6	3	.	.	.	.	201
2.50-2.99	.	.	.	16	24	2	.	1	.	.	43
3.00-3.49	5	.	.	.	.	.	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	49	936	2471	663	69	19	2	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3945.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	86	1001	24	3	5	1	.	.	.	.	1114
0.50-0.99	.	900	2456	72	5	1	.	.	.	.	3433
1.00-1.49	.	.	1224	49	18	1	.	.	.	.	1292
1.50-1.99	.	.	39	366	8	7	.	.	.	.	420
2.00-2.49	.	.	.	309	1	3	.	.	.	.	313
2.50-2.99	.	.	.	20	43	5	.	.	.	.	63
3.00-3.49	5	1	.	.	.	.	6
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	86	1901	3743	819	80	16	0	0	0	0	6222.

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 6222.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	99	927	22	2	6	.	.	.	.	.	1050
0.50-0.99	.	839	2969	59	6	.	.	.	.	.	3873
1.00-1.49	.	.	1732	225	20	3	.	.	.	.	1980
1.50-1.99	.	.	170	941	8	4	.	.	.	.	1123
2.00-2.49	.	.	.	494	193	.	.	.	.	.	687
2.50-2.99	.	.	.	26	260	7	.	.	.	.	293
3.00-3.49	11	56	.	.	.	.	67
3.50-3.99	9	.	.	.	.	9
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	99	1766	4893	1747	498	81	0	0	0	0	8505.

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 8505.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	90	641	32	1	6	.	.	.	.	.	764
0.50-0.99	.	768	2415	48	6	.	.	.	.	.	3237
1.00-1.49	.	.	1175	408	8	4	.	.	.	.	1595
1.50-1.99	.	.	74	740	6	1	.	.	.	.	821
2.00-2.49	.	.	.	228	247	.	.	.	.	.	475
2.50-2.99	.	.	.	1	252	8	.	.	.	.	261
3.00-3.49	2	59	.	.	.	.	61
3.50-3.99	14	.	.	.	.	14
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	90	1409	3696	1426	521	88	0	0	0	0	6771.

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 6771.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	81	610	59	2	1	.	.	.	.	.	752
0.50-0.99	.	917	1302	64	6	1	.	.	.	.	2284
1.00-1.49	.	.	644	214	1	.	.	.	.	.	865
1.50-1.99	.	.	108	255	63	1	.	.	.	.	370
2.00-2.49	.	.	.	111	62	2	.	.	.	.	175
2.50-2.99	18	.	.	.	.	64
3.00-3.49	1	.	.	.	.	18
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	81	1527	2113	646	138	23	1	0	0	0	4242.

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 4242.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	87	448	25	5							565
0.50-0.99		696	372	42	2						1112
1.00-1.49			275	39	5	2					321
1.50-1.99			60	16	3	1					80
2.00-2.49			4	4			1				9
2.50-2.99					1						1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	87	1144	736	106	11	3	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 1959.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	70	351	23	1							445
0.50-0.99		670	297	44	10	1					1022
1.00-1.49			255	21	4	6					286
1.50-1.99			60	5		2					67
2.00-2.49				3		1					4
2.50-2.99							1				1
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	70	1021	635	74	15	10	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 1715.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	70	428	56	2							556
0.50-0.99		1027	436	67	39	1					1570
1.00-1.49			407	20	20	9	1				457
1.50-1.99			179	23		5					207
2.00-2.49				17		1	1				19
2.50-2.99				7							7
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	70	1455	1078	136	59	16	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2641.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	79	459	194	44	1						777
0.50-0.99		1363	658	455	167	7		1			2651
1.00-1.49			529	106	110	20					763
1.50-1.99			295	83	33	20					431
2.00-2.49			10	67	8	8	2				94
2.50-2.99				8	13	4	3				28
3.00-3.49					3	4					7
3.50-3.99						1					1
4.00-4.49							1				0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	79	1822	1686	763	335	64	6	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4460.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	128	624	305	7	23	2	3	.	.	.	1064
0.50-0.99	.	1071	2363	737	223	4	1	.	.	.	4199
1.00-1.49	.	.	818	931	223	4	1	1	.	.	1879
1.50-1.99	.	.	176	498	324	44	1	.	.	.	1043
2.00-2.49	.	.	5	270	172	115	13	.	.	.	564
2.50-2.99	.	.	.	32	240	103	20	.	.	.	253
3.00-3.49	.	.	.	2	40	183	45	6	.	.	134
3.50-3.99	1	84	68	11	.	.	86
4.00-4.49	7	16	31	.	.	47
4.50-4.99	1	16	.	.	17
5.00-5.49	4	.	.	5
5.50-5.99	2	.	1
6.00-6.49	3	.	3
6.50-6.99	1	1
7.00+	0
TOTAL	128	1695	3667	2477	1023	534	176	74	6	1	9162

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9162.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	161	886	365	26	5	2	.	.	.	.	1445
0.50-0.99	.	1283	3871	698	116	22	3	2	1	.	5996
1.00-1.49	.	.	1401	1283	282	65	3	3	4	.	3041
1.50-1.99	.	.	171	728	361	110	1	1	1	1	1374
2.00-2.49	.	.	.	402	206	156	7	2	2	1	774
2.50-2.99	.	.	.	39	436	98	29	8	1	.	611
3.00-3.49	82	311	24	10	1	.	428
3.50-3.99	3	239	47	11	1	.	301
4.00-4.49	40	139	25	1	.	205
4.50-4.99	3	65	70	2	.	140
5.00-5.49	3	72	11	.	86
5.50-5.99	26	14	1	41
6.00-6.49	3	23	1	27
6.50-6.99	13	4	17
7.00+	8	11	19
TOTAL	161	2169	5808	3176	1491	1046	321	231	83	19	13587

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.0 NO. OF CASES= 13587.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	93	623	196	12	1	.	.	.	.	.	925
0.50-0.99	.	864	3844	650	80	7	.	.	.	.	5445
1.00-1.49	.	.	2069	1361	288	36	1	.	.	.	3755
1.50-1.99	.	.	164	1574	373	115	3	.	.	.	2229
2.00-2.49	.	.	1	764	381	166	11	.	.	.	1323
2.50-2.99	.	.	.	28	778	125	33	10	.	.	974
3.00-3.49	83	528	19	21	.	.	651
3.50-3.99	376	65	14	6	.	461
4.00-4.49	42	168	26	9	.	245
4.50-4.99	3	65	89	12	.	169
5.00-5.49	4	57	14	.	75
5.50-5.99	1	13	31	1	46
6.00-6.49	4	33	3	40
6.50-6.99	9	2	11
7.00+	12	12
TOTAL	93	1487	6274	4389	1984	1398	370	234	114	18	15324

MEAN HS(M) = 1.5 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 5.2 NO. OF CASES= 15324.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	41	185	22	1	.	.	.	.	.	.	249
0.50-0.99	.	204	1001	82	4	.	.	.	.	.	1291
1.00-1.49	.	.	614	528	45	4	.	.	.	.	1191
1.50-1.99	.	.	71	601	218	39	1	.	.	.	930
2.00-2.49	.	.	.	315	224	120	3	.	.	.	662
2.50-2.99	.	.	.	12	357	99	22	.	.	.	483
3.00-3.49	39	22	22	13	.	.	346
3.50-3.99	187	38	13	.	.	238
4.00-4.49	24	86	19	6	.	135
4.50-4.99	2	23	22	8	1	61
5.00-5.49	1	1	6	.	31
5.50-5.99	7	.	8
6.00-6.49	1	1	3
6.50-6.99	2	0
7.00+	0
TOTAL	41	389	1708	1539	887	737	196	98	36	4	5289

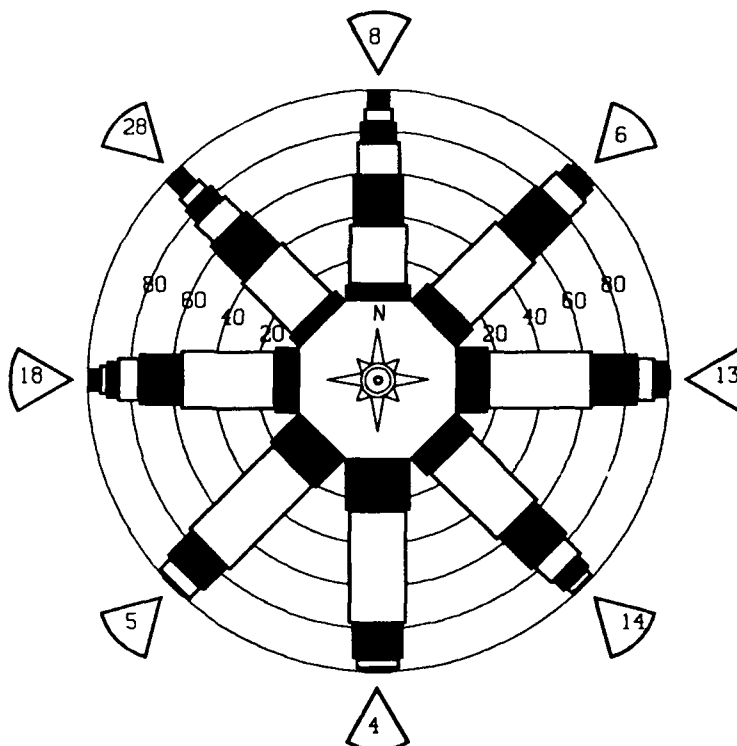
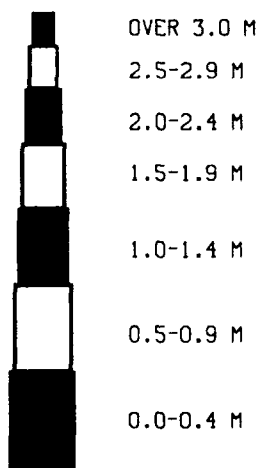
MEAN HS(M) = 1.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.5 NO. OF CASES= 5289.

STATION S57 46.80N 85.15W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	126	843	145	11	48	4	.	.	.	.	1125
0.50-0.99	.	1190	2612	330	121	16	.	.	.	.	4184
1.00-1.49	.	.	1347	621	177	74	1	.	.	.	2105
1.50-1.99	.	.	175	700	168	45	1	.	.	.	1089
2.00-2.49	.	.	2	352	177	50	5	.	.	.	610
2.50-2.99	.	.	.	24	279	162	13	2	.	.	368
3.00-3.49	31	100	9	5	.	.	207
3.50-3.99	12	22	4	.	.	126
4.00-4.49	51	8	1	.	72
4.50-4.99	17	23	2	.	42
5.00-5.49	17	3	.	20
5.50-5.99	4	5	.	9
6.00-6.49	6	.	6
6.50-6.99	2	.	2
7.00+	2	2
TOTAL	126	2033	4281	2038	824	463	118	63	19	2	93504

MEAN HS(M)= 1.2 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.

STATION 57
 46.80N, 85.15 W
 93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S57 (46.80N 85.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.0	1.4	1.2	1.4	1.0	0.8	0.7	0.7	0.9	1.3	1.5	1.5	1.1
1957	1.7	1.5	1.4	1.1	1.1	1.0	0.9	0.8	1.1	1.1	1.1	1.1	1.1
1958	1.4	2.1	1.2	1.3	1.2	1.0	0.9	0.8	1.1	1.3	1.3	1.3	1.1
1959	1.7	1.6	1.4	1.3	1.3	0.9	0.9	0.8	1.1	1.4	1.4	1.4	1.1
1960	1.6	1.6	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.3	1.3	1.1
1961	1.2	1.3	1.7	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.2	1.1	1.1
1962	1.6	1.3	1.0	1.1	0.8	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1963	1.3	1.5	1.4	1.3	0.9	0.7	0.7	0.8	0.8	0.9	1.1	1.1	1.1
1964	1.9	1.6	1.7	1.1	1.2	0.9	0.9	0.8	1.1	1.2	1.1	1.1	1.1
1965	1.3	2.0	1.3	1.0	1.0	0.9	0.9	0.8	1.1	1.1	1.1	1.1	1.1
1966	1.9	1.7	1.9	1.4	1.4	0.9	0.9	0.8	1.1	1.4	1.1	1.1	1.1
1967	1.3	1.9	1.6	1.3	1.1	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1968	1.9	2.6	1.7	1.4	1.1	0.8	0.8	0.9	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.7	1.3	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.3	1.1	1.1	0.8	0.8	0.8	0.9	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.3	1.1	1.1	0.8	0.8	0.8	0.9	1.1	1.1	1.1	1.1
1972	2.0	1.3	1.3	1.0	0.8	0.9	0.8	0.8	0.9	1.1	1.1	1.1	1.1
1973	1.4	1.6	1.3	1.1	1.1	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.3	1.3	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.3	1.5	1.1	0.7	0.8	0.8	0.8	0.9	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.7	1.4	0.9	0.7	0.7	0.7	0.7	0.9	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	0.7	0.7	0.6	0.8	0.9	1.1	1.1	1.1	1.1
1979	1.1	1.2	1.4	0.9	0.7	0.7	0.6	0.7	0.9	1.1	1.1	1.1	1.1
1980	1.1	1.0	1.5	0.9	0.8	0.7	0.5	0.7	1.0	1.4	1.1	1.1	1.1
1981	1.1	1.3	1.3	1.1	0.7	0.6	0.5	0.5	1.0	1.1	1.1	1.1	1.1
1982	1.1	1.2	1.1	1.3	0.6	0.6	0.6	0.7	0.9	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.0	0.9	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	0.9	0.7	0.6	0.5	0.9	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.0	0.8	0.8	0.5	0.6	0.7	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	0.8	0.7	0.5	0.7	0.9	0.9	1.1	1.1	1.1
1987	1.1	1.1	1.3	1.1	0.8	0.7	0.7	0.9	0.9	1.2	1.5	1.4	1.1
MEAN	1	1.5	1.5	1.1	0.9	0.8	0.7	0.8	1.0	1.2	1.5	1.6	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S57 (46.80N 85.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.8	5.2	3.9	4.6	3.2	3.1	2.2	2.6	3.9	5.5	4.6	4.9	
1957	5.1	5.3	4.7	3.5	3.5	3.1	5.1	3.1	5.1	4.2	5.9	5.9	
1958	5.7	5.9	4.6	5.1	3.5	3.5	2.5	2.6	4.0	4.0	6.0	4.9	
1959	4.5	4.7	5.5	3.7	4.5	3.7	2.6	2.2	4.5	5.3	5.7	7.5	
1960	5.3	5.0	3.6	3.5	2.7	2.0	2.9	2.1	4.2	5.7	5.5	4.2	
1961	5.3	4.5	3.7	3.9	3.3	3.3	2.8	3.3	3.8	4.3	5.3	7.0	
1962	5.2	4.2	4.7	3.9	2.9	2.0	2.6	1.9	3.8	4.9	4.6	6.2	
1963	4.5	6.3	4.4	6.4	4.0	2.4	3.1	2.3	2.1	3.6	7.2	5.1	
1964	6.7	5.2	6.2	3.6	4.3	3.5	2.8	4.1	5.4	4.3	7.0	4.9	
1965	6.1	6.2	4.4	3.3	2.8	3.1	2.9	2.8	4.0	6.5	7.2	5.2	
1966	7.5	5.4	5.8	4.0	5.0	3.0	3.2	3.8	6.0	7.2	4.9	6.1	
1967	6.5	6.2	5.8	4.1	3.8	2.4	3.2	2.5	3.8	4.4	5.5	4.9	
1968	5.0	7.9	4.9	5.3	3.0	2.6	3.7	3.6	2.9	4.3	6.0	5.5	
1969	4.7	5.4	4.6	3.4	2.6	2.0	3.0	3.7	3.7	3.7	4.9	5.5	
1970	4.9	5.4	4.5	5.2	3.5	2.3	2.6	2.9	4.5	4.4	6.8	5.8	
1971	5.4	7.0	5.9	4.2	3.0	2.0	2.9	2.9	4.1	4.4	4.8	6.1	
1972	8.0	6.4	4.7	3.9	2.9	2.4	2.6	3.0	4.7	8.6	4.5	7.0	
1973	4.6	3.4	4.7	3.0	3.7	2.2	2.5	3.5	4.9	6.1	6.0	3.7	
1974	6.7	5.6	5.0	3.3	3.3	2.4	2.1	2.4	3.6	4.2	4.2	4.3	
1975	4.7	4.8	3.9	3.6	2.5	2.9	3.4	3.4	3.0	4.2	6.6	5.7	
1976	7.1	6.2	5.9	3.3	5.1	2.0	3.0	3.8	4.6	5.5	6.2	6.8	
1977	6.1	6.1	6.2	3.3	2.8	2.5	3.3	2.9	4.1	4.1	4.9	3.6	
1978	5.9	3.7	6.4	4.1	2.4	2.4	2.3	3.0	2.4	3.9	4.9	5.0	
1979	4.2	3.9	4.0	4.5	2.3	2.4	2.1	3.8	2.7	2.9	4.9	4.7	
1980	6.3	3.5	6.2	3.2	3.0	2.2	1.4	2.0	4.4	6.0	6.7	5.3	
1981	3.5	4.1	4.4	3.8	1.9	2.5	1.6	1.7	6.3	5.2	5.2	3.7	
1982	7.7	4.2	7.7	6.5	1.6	2.3	2.1	2.6	4.8	4.9	4.6	4.0	
1983	4.2	3.0	3.9	2.3	2.4	2.1	1.8	2.1	2.9	3.8	4.3	4.1	
1984	6.1	4.2	6.3	3.2	3.5	1.8	2.1	1.7	3.2	4.1	6.5	6.2	
1985	5.0	4.1	4.1	4.5	1.8	3.6	1.7	1.9	3.4	4.3	3.8	5.2	
1986	4.8	3.5	5.2	3.7	3.8	2.7	1.5	2.6	4.0	4.5	4.1	4.6	
1987	5.3	4.5	4.6	5.3	3.0	3.1	2.7	4.3	3.4	4.5	6.1	4.5	

32 YR. STATISTICS FOR WIS STATION S57

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.2
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.9
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	8.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	307.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	72101703

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	29	194	16	3							242
0.50-0.99		314	810	57	4						1185
1.00-1.49			548	311	64	13					934
1.50-1.99			45	489	89	55	2				680
2.00-2.49				282	105	59	9				455
2.50-2.99				19	214	29	20	1			283
3.00-3.49					83	49	9	7			148
3.50-3.99					1	38	12	10			61
4.00-4.49						6	1				7
4.50-4.99							1	4			5
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	29	508	1417	1161	560	249	54	23	0	0	

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 5.0 NO. OF CASES= 3759.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	36	227	23								286
0.50-0.99		347	828	66	6	1					1248
1.00-1.49			533	165	54	8					760
1.50-1.99			89	255	35	26					405
2.00-2.49				132	19	26	11	1			189
2.50-2.99				24	41	5	5	1			76
3.00-3.49				3	10	4	1	2			20
3.50-3.99					2	5	1	1	1		10
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	36	574	1473	645	167	75	18	5	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 2814.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	47	244	16								307
0.50-0.99		298	905	74	6	1					1284
1.00-1.49			685	84	32	8					809
1.50-1.99				209	24	14	3				316
2.00-2.49			66	149	3	11	3	1			167
2.50-2.99				13	8						21
3.00-3.49					2						2
3.50-3.99					1						1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	47	542	1672	529	76	34	6	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 2729.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	56	351	21								428
0.50-0.99		1053	1207	93	4						2357
1.00-1.49			690	36	29	6	1				762
1.50-1.99			133	137	10	11	1				292
2.00-2.49				86	1	5		2			94
2.50-2.99				7	1						8
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	56	1404	2051	359	45	22	2	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3695.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	122	501	26	4	7	.	.	.	.	.	653
0.50-0.99	.	2375	1910	81	7	.	.	.	.	.	4373
1.00-1.49	.	.	861	14	19	2	.	.	.	.	896
1.50-1.99	.	.	216	267	2	5	1	.	.	.	491
2.00-2.49	.	.	.	99	2	1	.	1	.	.	101
2.50-2.99	.	.	.	4	.	.	.	.	.	.	6
3.00-3.49	1	.	.	.	.	.	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	122	2876	3013	469	31	8	1	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 6105.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	88	503	14	53	10	.	.	.	.	.	605
0.50-0.99	.	2244	1691	20	13	2	.	.	.	.	3998
1.00-1.49	.	.	1457	328	1	1	.	.	.	.	1492
1.50-1.99	.	.	882	220	4	.	.	.	.	.	1212
2.00-2.49	.	.	24	16	.	.	.	.	.	.	244
2.50-2.99	.	.	.	1	4	.	.	.	.	.	20
3.00-3.49	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	88	2747	4068	638	32	3	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 7093.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	51	448	9	2	.	.	.	.	.	.	510
0.50-0.99	.	2007	1242	31	3	.	.	.	.	.	3283
1.00-1.49	.	.	921	98	8	2	.	.	.	.	1029
1.50-1.99	.	.	391	234	3	2	.	.	.	.	630
2.00-2.49	.	.	44	43	8	.	.	.	.	.	95
2.50-2.99	.	.	.	7	1	1	.	.	.	.	9
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	51	2455	2607	415	23	5	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 5203.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	49	536	9	20	.	.	.	.	.	.	594
0.50-0.99	.	1473	2378	257	4	1	.	.	.	.	3871
1.00-1.49	.	.	1058	441	1	1	.	.	.	.	1320
1.50-1.99	.	.	96	113	21	.	.	.	.	.	539
2.00-2.49	.	.	7	3	12	.	.	.	.	.	141
2.50-2.99	15
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	49	2009	3548	834	38	2	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 6067.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	42	366	5	1	2	.	.	.	.	.	414
0.50-0.99	.	818	1202	16	.	.	.	.	.	.	2038
1.00-1.49	.	.	850	33	1	2	.	.	.	.	886
1.50-1.99	.	.	110	222	.	.	1	.	.	.	333
2.00-2.49	.	.	.	141	16	.	.	.	.	.	141
2.50-2.99	.	.	.	9	6	.	.	.	.	.	25
3.00-3.49	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	42	1184	2167	422	25	2	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3598.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	39	276	3	17	6	.	.	.	.	.	318
0.50-0.99	.	793	719	22	5	.	.	.	.	.	1535
1.00-1.49	.	.	656	139	.	2	.	.	.	.	683
1.50-1.99	.	.	129	98	.	.	1	.	.	.	270
2.00-2.49	.	.	2	4	10	.	.	.	.	.	101
2.50-2.99	5	.	.	.	.	.	14
3.00-3.49	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	39	1069	1509	280	26	3	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2744.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	41	360	13	1	18	1	.	.	.	.	415
0.50-0.99	.	1043	587	19	10	4	.	.	.	.	1668
1.00-1.49	.	.	571	6	10	4	.	.	.	.	591
1.50-1.99	.	.	264	38	1	3	.	.	.	.	306
2.00-2.49	.	.	1	41	1	1	.	.	.	.	44
2.50-2.99	.	.	.	9	.	.	.	.	.	.	9
3.00-3.49	.	.	.	1	1	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	41	1403	1436	115	30	9	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 2845.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	36	359	62	21	1	5	.	1	.	.	479
0.50-0.99	.	1175	733	252	112	5	.	.	.	.	2278
1.00-1.49	.	.	580	93	75	13	.	.	.	.	761
1.50-1.99	.	.	279	109	35	13	.	.	.	.	436
2.00-2.49	.	.	11	77	21	16	3	.	.	.	129
2.50-2.99	.	.	.	9	18	6	1	.	.	.	34
3.00-3.49	2	7	.	.	.	.	9
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	36	1534	1665	561	264	64	5	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 3872.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	66	473	152	5	34	4	1	1	.	.	696
0.50-0.99	.	1063	2223	648	242	5	1	1	.	.	3974
1.00-1.49	.	.	886	886	242	5	1	1	.	.	2020
1.50-1.99	.	.	167	475	302	55	1	1	.	.	1000
2.00-2.49	.	.	2	275	168	115	5	.	.	.	565
2.50-2.99	.	.	.	27	253	88	22	2	.	.	392
3.00-3.49	43	192	33	2	.	.	270
3.50-3.99	3	122	49	10	1	.	185
4.00-4.49	8	68	27	.	.	103
4.50-4.99	12	35	.	.	47
5.00-5.49	24	1	.	25
5.50-5.99	3	6	.	9
6.00-6.49	5	1	6
6.50-6.99	0
7.00+	0
TOTAL	66	1536	3430	2316	1045	589	191	105	13	1	

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 8710.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	79	727	181	12	3	25	3	.	.	.	1002
0.50-0.99	.	1158	4014	700	133	25	3	.	.	.	6033
1.00-1.49	.	.	1579	1337	311	64	7	3	6	1	3308
1.50-1.99	.	.	224	868	337	113	3	1	1	1	1547
2.00-2.49	.	.	.	474	238	147	8	.	2	1	870
2.50-2.99	.	.	.	50	514	114	26	10	1	.	715
3.00-3.49	97	350	13	12	1	.	473
3.50-3.99	2	259	53	12	2	.	328
4.00-4.49	50	141	20	.	.	211
4.50-4.99	6	75	75	5	.	161
5.00-5.49	7	69	11	.	87
5.50-5.99	26	28	.	54
6.00-6.49	2	26	.	28
6.50-6.99	1	10	3	14
7.00+	5	18	23
TOTAL	79	1885	5998	3441	1635	1128	336	231	97	24	

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 5.1 NO. OF CASES= 13918.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	59	456	124	5	64	3	.	.	.	.	644
0.50-0.99	.	737	3567	672	318	36	.	.	.	.	5043
1.00-1.49	.	.	2077	1411	318	36	.	.	.	.	3842
1.50-1.99	.	.	175	1951	284	118	3	.	1	.	2532
2.00-2.49	.	.	1	1118	423	140	11	1	.	.	1694
2.50-2.99	.	.	.	36	926	150	26	16	.	.	1154
3.00-3.49	175	549	21	16	.	.	761
3.50-3.99	3	375	59	16	.	.	448
4.00-4.49	63	163	36	6	.	268
4.50-4.99	3	53	77	16	.	145
5.00-5.49	7	42	12	.	61
5.50-5.99	16	31	.	47
6.00-6.49	6	17	1	24
6.50-6.99	1	3	8
7.00+	1	5	6
TOTAL	59	1193	5944	5193	2193	1437	343	221	85	9	

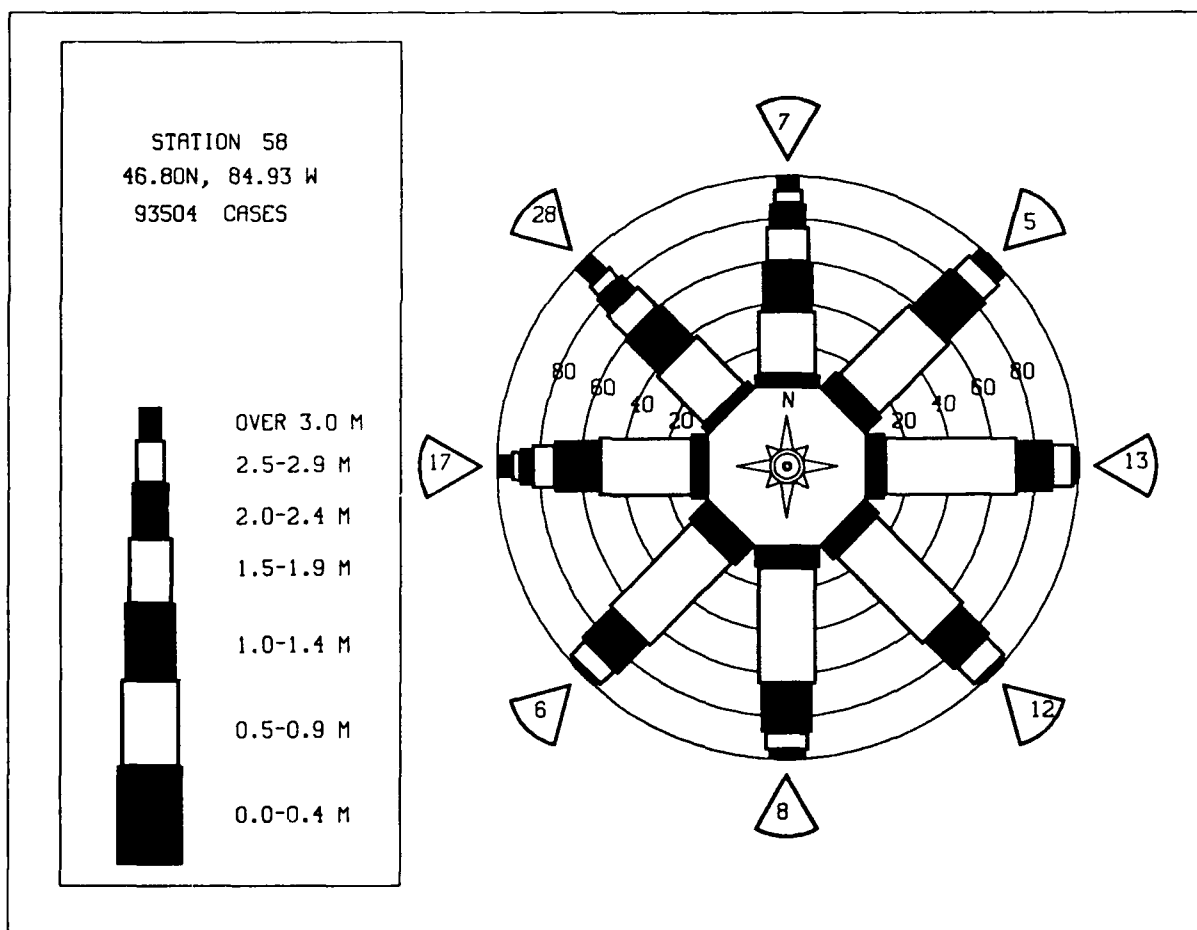
MEAN HS(M) = 1.6 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 5.3 NO. OF CASES= 15617.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	33	160	8	8	3	.	.	.	.	.	201
0.50-0.99	.	211	869	48	3	.	.	.	.	.	1131
1.00-1.49	.	.	610	365	49	4	1	.	.	.	1029
1.50-1.99	.	.	88	623	126	38	2	.	.	.	877
2.00-2.49	.	.	1	344	163	80	4	.	.	.	592
2.50-2.99	.	.	.	18	335	74	22	4	.	.	453
3.00-3.49	102	187	16	18	1	.	324
3.50-3.99	5	175	29	11	2	.	222
4.00-4.49	26	58	25	2	.	111
4.50-4.99	5	16	27	9	1	58
5.00-5.49	3	16	7	.	26
5.50-5.99	2	8	.	10
6.00-6.49	8	.	8
6.50-6.99	1	1
7.00+	0
TOTAL	33	371	1576	1398	783	589	151	103	37	2	

MEAN HS(M) = 1.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.5 NO. OF CASES= 4735.

STATION S58 46.80N 84.93W FOR ALL DIRECTIONS											TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	88	619	68	5							780
0.50-0.99		1711	2489	285	41	4					4530
1.00-1.49			1457	514	124	17					2112
1.50-1.99			336	679	125	46	1				1187
2.00-2.49			9	370	117	60	5				561
2.50-2.99				26	236	47	12	3			324
3.00-3.49					53	134	9	5			201
3.50-3.99					1	98	20	5			124
4.00-4.49						15	43	11			69
4.50-4.99						1	15	22	2		40
5.00-5.49							1	15	3		19
5.50-5.99								4	7		11
6.00-6.49									5		5
6.50-6.99									1		1
7.00+										2	2
TOTAL	88	2330	4359	1879	697	422	106	65	18	2	
MEAN HS(M)= 1.2 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.											



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S58 (46.80N 84.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.0	1.4	1.2	1.3	1.1	0.8	0.8	0.7	1.0	1.2	1.4	1.4	1.1
1957	1.7	1.5	1.4	1.1	1.1	1.0	1.0	0.9	1.2	1.1	1.8	1.9	1.3
1958	1.4	2.1	1.2	1.2	1.3	1.0	0.8	0.9	1.1	1.3	2.0	1.5	1.3
1959	1.7	1.6	1.4	1.3	1.2	1.0	0.8	0.8	1.1	1.4	1.8	1.7	1.3
1960	1.6	1.6	1.2	1.1	0.9	0.8	0.8	0.8	1.0	1.3	1.7	1.5	1.2
1961	1.2	1.2	1.6	1.1	1.1	0.9	0.7	0.8	1.2	1.2	1.5	1.6	1.2
1962	1.8	1.3	0.9	1.1	0.8	0.7	0.7	0.7	1.1	1.0	1.2	1.6	1.1
1963	1.4	1.5	1.3	1.3	1.0	0.7	0.8	0.8	0.8	1.0	1.6	1.5	1.1
1964	1.9	1.6	1.7	1.3	1.2	1.0	0.8	1.0	1.3	1.3	1.6	1.5	1.3
1965	1.9	2.0	1.3	1.0	1.0	1.0	1.0	0.9	1.0	1.6	1.8	1.5	1.3
1966	1.9	1.7	1.8	1.4	1.4	0.9	1.0	1.0	1.4	1.7	1.7	1.7	1.5
1967	1.8	1.9	1.5	1.3	1.2	0.8	0.8	0.8	1.0	1.4	1.6	1.6	1.3
1968	1.5	2.6	1.7	1.3	1.1	0.8	1.0	0.9	1.0	1.3	1.8	1.7	1.4
1969	1.7	1.5	1.6	1.0	1.0	0.9	0.7	1.0	1.1	1.3	1.5	1.6	1.2
1970	1.5	1.7	1.5	1.2	1.0	0.8	0.8	0.9	1.3	1.3	1.6	1.5	1.2
1971	1.8	1.6	1.7	1.2	1.0	0.7	0.9	0.8	1.0	1.1	1.4	1.6	1.2
1972	2.0	1.5	1.5	1.0	0.8	0.9	0.8	0.8	1.3	1.6	1.2	1.5	1.2
1973	1.6	1.3	1.4	1.3	1.1	0.8	0.8	0.7	1.1	1.2	1.8	1.3	1.2
1974	1.4	1.3	1.6	1.0	1.0	0.8	0.8	0.7	1.1	1.3	1.3	1.2	1.1
1975	1.6	1.3	1.4	1.2	0.7	0.8	0.8	0.9	1.0	1.3	1.4	1.4	1.1
1976	1.8	1.6	1.7	1.2	1.1	0.8	0.8	0.9	1.2	1.2	1.8	1.6	1.3
1977	1.7	1.4	1.0	0.8	0.8	0.8	0.7	0.8	0.9	1.1	1.3	1.4	1.1
1978	1.6	1.2	1.1	0.7	0.7	0.7	0.8	0.8	0.9	1.3	1.4	1.6	1.1
1979	1.5	1.2	1.3	0.9	0.8	0.7	0.6	0.8	0.9	1.0	1.4	1.7	1.1
1980	1.6	1.1	1.0	0.8	0.8	0.7	0.6	0.7	1.1	1.4	1.3	1.5	1.1
1981	1.1	1.3	1.3	1.1	0.8	0.7	0.6	0.5	1.0	1.1	1.3	1.2	1.0
1982	1.8	1.2	1.6	1.3	0.6	0.7	0.7	0.7	0.9	1.1	1.3	1.4	1.1
1983	1.5	1.1	1.3	1.0	0.9	0.7	0.6	0.7	0.9	1.1	1.5	1.5	1.1
1984	1.2	1.3	1.4	1.0	1.0	0.7	0.6	0.5	0.9	1.0	1.6	1.7	1.1
1985	1.5	1.4	1.4	1.0	0.7	0.8	0.6	0.6	0.8	1.1	1.3	1.4	1.0
1986	1.4	1.1	1.4	1.2	0.8	0.8	0.6	0.7	1.0	0.9	1.5	1.4	1.1
1987	1.5	1.3	1.3	1.1	0.8	0.8	0.8	0.9	0.9	1.2	1.4	1.4	1.1
MEAN	1.6	1.5	1.4	1.1	1.0	0.8	0.8	0.8	1.0	1.2	1.5	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S58 (46.80N 84.93W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.1	4.9	4.0	4.5	3.1	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1957	4.8	4.3	4.7	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1958	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1959	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1960	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1961	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1962	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1963	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1964	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1965	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1966	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1967	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1968	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1969	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1970	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1971	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1972	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1973	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1974	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1975	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1976	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1977	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1978	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1979	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1980	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1981	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1982	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1983	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1984	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1985	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1986	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	
1987	4.8	4.7	4.6	4.7	3.2	2.9	2.3	2.6	3.8	5.4	4.9	5.0	

32 YR. STATISTICS FOR WIS STATION S58

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.2
MEAN PEAK WAVE PERIOD	(SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	8.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	291.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59121000

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	140	592	337	62	1	.	.	.	.	.	732
0.50-0.99	.	1555	786	10	.	.	.	.	.	.	1955
1.00-1.49	.	.	191	11	.	.	.	.	.	.	796
1.50-1.99	.	.	5	4	.	.	.	.	.	.	202
2.00-2.49	9
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	140	2147	1319	87	1	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3458.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	209	787	1	33	1	.	.	.	.	.	997
0.50-0.99	.	1048	476	36	1	.	.	.	.	.	1558
1.00-1.49	.	.	559	121	.	.	.	.	.	.	596
1.50-1.99	.	.	66	69	2	.	.	.	.	.	187
2.00-2.49	.	.	1	6	12	.	.	.	.	.	72
2.50-2.99	6	.	.	.	.	.	18
3.00-3.49	6	.	.	.	.	.	6
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	209	1835	1103	265	22	1	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3218.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	205	662	1	1	.	.	.	.	.	.	867
0.50-0.99	.	861	678	9	.	.	.	.	.	.	1540
1.00-1.49	.	.	757	231	.	.	.	.	.	.	766
1.50-1.99	.	.	53	121	.	.	.	.	.	.	284
2.00-2.49	.	.	.	10	10	.	.	.	.	.	121
2.50-2.99	3	.	.	.	.	.	20
3.00-3.49	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	205	1523	1488	372	13	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3372.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	209	464	1	.	.	.	.	.	.	.	673
0.50-0.99	.	1480	1164	1	.	.	.	.	.	.	2644
1.00-1.49	.	.	699	145	.	.	.	.	.	.	700
1.50-1.99	.	.	119	84	.	.	.	.	.	.	264
2.00-2.49	.	.	.	6	2	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	209	1944	1982	236	2	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 4093.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	287	527	2148	.	.	.	.	.	.	.	814
0.50-0.99	.	3164	961	1	.	.	.	.	.	.	5312
1.00-1.49	.	.	225	259	.	.	.	.	.	.	962
1.50-1.99	.	.	.	101	.	.	.	.	.	.	484
2.00-2.49	.	.	.	4	2	.	.	.	.	.	101
2.50-2.99	1	.	.	.	.	.	6
3.00-3.49	0
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	287	3691	3334	365	3	0	0	0	0	6	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 7186.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	205	710	.	.	.	.	.	.	.	.	915
0.50-0.99	.	2122	3026	6	.	.	.	.	.	.	5148
1.00-1.49	.	.	2364	921	.	.	.	.	.	.	2370
1.50-1.99	.	.	370	726	.	.	.	.	.	.	1291
2.00-2.49	.	.	.	75	77	.	.	.	.	.	726
2.50-2.99	16	.	.	.	.	.	152
3.00-3.49	1	3	.	.	.	.	16
3.50-3.99	1	.	.	.	.	4
4.00-4.49	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	205	2832	5760	1728	94	4	0	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 9938.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	172	781	.	.	.	.	.	.	.	.	953
0.50-0.99	.	1141	2699	7	.	.	.	.	.	.	3840
1.00-1.49	.	.	2381	766	.	.	.	.	.	.	2388
1.50-1.99	.	.	144	517	.	.	.	.	.	.	910
2.00-2.49	.	.	.	39	50	.	.	.	.	.	517
2.50-2.99	11	.	.	.	.	.	89
3.00-3.49	2	.	.	.	.	.	11
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	172	1922	5224	1329	63	0	0	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 8150.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	152	546	.	.	.	.	.	.	.	.	698
0.50-0.99	.	1268	1876	3	.	.	.	.	.	.	3144
1.00-1.49	.	.	1285	315	.	.	.	.	.	.	1288
1.50-1.99	.	.	126	187	.	.	.	.	.	.	441
2.00-2.49	.	.	.	9	12	.	.	.	.	.	187
2.50-2.99	2	.	.	.	.	.	21
3.00-3.49	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	152	1814	3287	514	14	0	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 5411.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	168	390	2	.	.	.	.	.	.	.	560
0.50-0.99	.	1415	1219	.	.	.	.	.	.	.	2634
1.00-1.49	.	.	650	.	.	.	.	.	.	.	650
1.50-1.99	.	.	159	135	.	.	.	.	.	.	294
2.00-2.49	.	.	.	42	.	.	.	.	.	.	42
2.50-2.99	.	.	.	8	.	.	.	.	.	.	8
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	168	185	2030	185	1	0	0	0	0	0	3922

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3922.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	133	545	2	.	.	.	.	.	.	.	680
0.50-0.99	.	1702	688	.	.	.	.	.	.	.	2390
1.00-1.49	.	.	539	.	.	.	.	.	.	.	539
1.50-1.99	.	.	264	80	.	.	.	.	.	.	344
2.00-2.49	.	.	1	50	.	.	.	.	.	.	51
2.50-2.99	.	.	.	7	.	.	.	.	.	.	7
3.00-3.49	.	.	.	1	1	.	.	.	.	.	2
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	133	2247	1494	138	2	0	0	0	0	0	3757

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3757.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	129	648	1	.	.	.	.	.	.	.	778
0.50-0.99	.	2250	698	.	.	.	.	.	.	.	2948
1.00-1.49	.	.	736	.	.	.	.	.	.	.	736
1.50-1.99	.	.	418	57	.	.	.	.	.	.	475
2.00-2.49	.	.	.	50	.	.	.	.	.	.	50
2.50-2.99	.	.	.	9	.	.	.	.	.	.	9
3.00-3.49	0
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	129	2898	1853	116	1	0	0	0	0	0	4676

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= NO. OF CASES= 4676.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	192	884	.	.	.	.	.	.	.	.	1076
0.50-0.99	.	2022	301	.	.	.	.	.	.	.	2323
1.00-1.49	.	.	914	.	.	.	.	.	.	.	914
1.50-1.99	.	.	294	33	.	.	.	.	.	.	327
2.00-2.49	.	.	5	24	.	.	.	.	.	.	29
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	192	2906	1514	58	0	0	0	0	0	0	4370

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4370.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	332	1259	213	.	.	.	.	.	.	.	1591
0.50-0.99	.	2102	886	.	.	.	.	.	.	.	2315
1.00-1.49	.	.	227	.	.	.	.	.	.	.	886
1.50-1.99	.	.	9	22	.	.	.	.	.	.	227
2.00-2.49	.	.	.	4	.	.	.	.	.	.	31
2.50-2.99	.	.	.	1	.	.	.	.	.	.	4
3.00-3.49	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	332	3361	1335	27	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4732.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	303	1796	830	.	.	.	.	.	.	.	2099
0.50-0.99	.	4315	1546	.	.	.	.	.	.	.	5145
1.00-1.49	.	.	836	105	.	.	.	.	.	.	1546
1.50-1.99	.	.	27	173	.	.	.	.	.	.	941
2.00-2.49	.	.	.	36	.	.	.	.	.	.	200
2.50-2.99	.	.	.	5	2	.	.	.	.	.	36
3.00-3.49	7
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	303	6111	3239	319	2	0	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 9332.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	163	843	1	.	.	.	.	.	.	.	1007
0.50-0.99	.	4940	2516	.	.	.	.	.	.	.	7456
1.00-1.49	.	.	2325	.	.	.	.	.	.	.	2325
1.50-1.99	.	.	2045	424	.	.	.	.	.	.	2469
2.00-2.49	.	.	.	380	.	.	.	.	.	.	380
2.50-2.99	.	.	.	75	.	.	.	.	.	.	75
3.00-3.49	.	.	.	5	11	.	.	.	.	.	16
3.50-3.99	3	.	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	163	5783	6887	884	14	0	0	0	0	0	

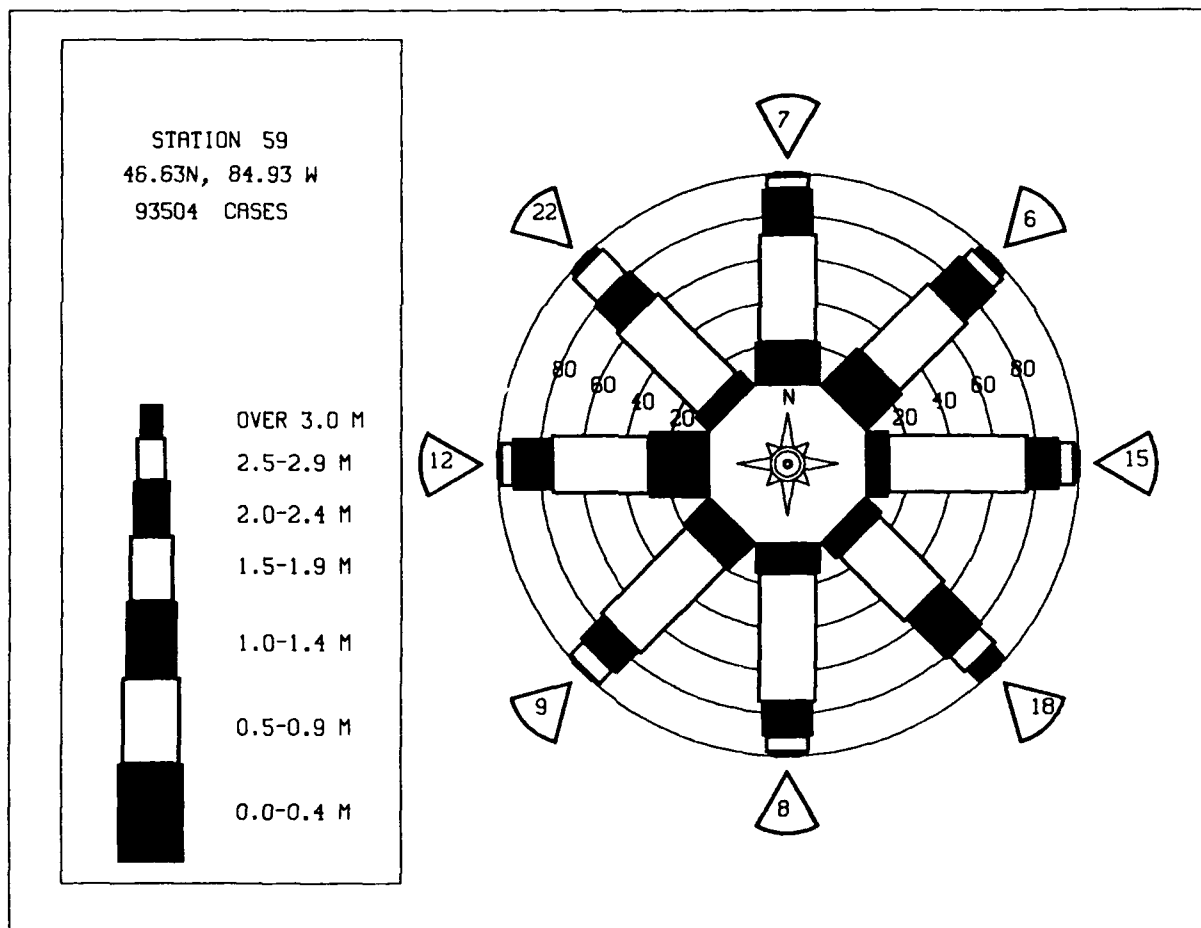
MEAN HS(M) = 1.0 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 12846.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	130	497	3	.	.	.	.	.	.	.	630
0.50-0.99	.	1984	694	5	.	.	.	.	.	.	2683
1.00-1.49	.	.	1143	5	.	.	.	.	.	.	1148
1.50-1.99	.	.	706	109	.	.	.	.	.	.	815
2.00-2.49	.	.	3	87	.	.	.	.	.	.	90
2.50-2.99	.	.	.	20	.	.	.	.	.	.	20
3.00-3.49	.	.	.	2	.	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	130	2481	2549	228	0	0	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 5043.

STATION S59 46.63N 84.93W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER
0.00-0.49	313	1193	1	10	.	.	.	.	.	1507
0.50-0.99	.	3337	1957	8	.	.	.	.	.	5304
1.00-1.49	.	.	1833	372	.	.	.	.	.	1861
1.50-1.99	.	.	623	264	.	.	.	.	.	997
2.00-2.49	.	.	5	31	16	.	.	.	.	269
2.50-2.99	.	.	.	1	5	.	.	.	.	47
3.00-3.49	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	313	4530	4441	686	21	0	0	0	0	0
MEAN HS(M)= 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.										



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S59 (46.63N 84.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	0.9	0.9	0.9	0.8	0.6	0.6	0.5	0.7	1.0	1.1	1.1	0.8
1957	1.1	1.2	1.0	0.8	0.8	0.8	0.7	0.6	0.8	0.8	1.2	1.2	0.9
1958	1.0	1.2	1.0	0.8	0.8	0.8	0.7	0.6	0.7	0.9	1.2	1.2	0.9
1959	1.1	1.1	1.1	0.9	0.8	0.7	0.6	0.6	0.9	1.0	1.2	1.2	0.9
1960	1.1	1.1	1.1	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.1	1.1	0.9
1961	0.9	1.0	1.2	0.8	0.8	0.6	0.6	0.6	0.9	0.9	1.1	1.1	0.9
1962	1.1	1.1	1.0	0.8	0.7	0.6	0.5	0.6	0.8	0.8	0.9	1.0	0.8
1963	0.9	0.9	1.0	0.9	0.7	0.6	0.6	0.6	0.7	0.7	1.0	1.1	0.8
1964	1.3	1.0	1.2	1.1	0.9	0.7	0.6	0.8	0.9	0.9	1.1	1.1	1.0
1965	1.3	1.2	1.0	0.8	0.8	0.7	0.7	0.7	0.8	1.0	1.2	1.1	0.9
1966	1.2	1.1	1.4	1.0	1.0	0.7	0.7	0.7	0.9	1.1	1.2	1.1	1.0
1967	1.2	1.2	1.2	1.0	0.9	0.7	0.6	0.6	0.8	1.0	0.9	1.1	0.9
1968	1.2	1.3	1.1	1.0	0.9	0.7	0.7	0.7	0.8	0.9	1.2	1.2	1.0
1969	1.2	0.9	1.1	0.8	0.8	0.7	0.6	0.7	0.8	0.9	0.9	1.1	0.9
1970	1.0	1.0	1.0	0.9	0.8	0.6	0.6	0.6	0.9	1.1	1.1	1.1	0.9
1971	1.2	1.2	1.1	0.8	0.8	0.6	0.6	0.6	0.7	0.9	1.0	1.1	0.9
1972	1.3	1.0	1.1	0.8	0.7	0.6	0.6	0.6	0.9	1.0	0.9	1.1	0.9
1973	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.6	0.8	0.9	1.1	1.1	0.9
1974	1.1	1.1	1.2	0.8	0.8	0.7	0.6	0.6	0.8	0.9	1.1	0.9	0.8
1975	1.2	0.9	1.1	0.8	0.6	0.7	0.6	0.7	0.7	0.9	1.1	1.0	0.9
1976	1.2	1.0	1.3	0.8	0.8	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1
1977	1.0	1.2	1.1	0.8	0.7	0.6	0.6	0.7	0.7	0.9	1.1	1.1	1.0
1978	1.1	0.8	0.9	0.8	0.6	0.6	0.6	0.6	0.8	0.9	1.1	1.0	0.8
1979	1.0	1.0	1.1	0.8	0.7	0.6	0.5	0.6	0.7	0.8	0.9	1.1	0.8
1980	1.1	0.8	1.1	0.8	0.7	0.6	0.5	0.6	0.8	0.9	0.9	1.1	0.8
1981	0.9	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	0.9	0.9	0.9	0.8
1982	1.1	0.9	1.2	0.9	0.6	0.6	0.6	0.5	0.7	0.9	1.1	1.1	0.8
1983	1.1	1.0	1.1	0.8	0.8	0.6	0.5	0.5	0.7	0.9	1.2	1.1	0.8
1984	1.0	1.1	1.0	0.9	0.7	0.6	0.5	0.5	0.7	0.8	1.1	1.1	0.8
1985	0.9	0.9	1.1	0.8	0.6	0.6	0.5	0.5	0.7	0.8	1.0	0.9	0.8
1986	1.0	0.9	1.1	0.9	0.7	0.6	0.6	0.6	0.8	0.7	1.1	1.1	0.8
1987	1.0	1.0	0.9	0.9	0.7	0.6	0.6	0.7	0.7	0.8	1.1	1.0	0.8
MEAN	1.1	1.0	1.1	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S59 (46.63N 84.93W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	2.2	3.1	2.0	2.0	2.0	1.7	1.5	1.7	2.7	2.6	2.4	
1957	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1958	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1959	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1960	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1961	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1962	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1963	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1964	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1965	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1966	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1967	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1968	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1969	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1970	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1971	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1972	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1973	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1974	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1975	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1976	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1977	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1978	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1979	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1980	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1981	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1982	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1983	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1984	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1985	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1986	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	
1987	2.0	2.2	2.2	2.0	2.0	2.0	1.1	1.1	2.2	2.2	2.2	2.2	

32 YR. STATISTICS FOR WIS STATION S59

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.8
LARGEST WAVE HS	(METERS)	4.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	7.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	122.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		65112706

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	96	436	5	1	1						539
0.50-0.99		835	873	36	2	1	1				1748
1.00-1.49			952	125	14	3					1094
1.50-1.99			102	571	40	20	1				734
2.00-2.49				423	89	39	1	3			555
2.50-2.99				21	196	16	6	4			243
3.00-3.49				2	44	10	2	1			59
3.50-3.99						9					9
4.00-4.49						2	1		1		4
4.50-4.99								1			1
5.00-5.49								1	1		2
5.50-5.99											0
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	96	1271	1932	1179	386	100	12	10	3	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 4678.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	84	454	11		1						550
0.50-0.99		912	876	24	5	2	1				1820
1.00-1.49			636	52	7						689
1.50-1.99			102	199	14	5	1				322
2.00-2.49				79	16	1		1			101
2.50-2.99				4	38						42
3.00-3.49					9						9
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	84	1366	1619	358	88	15	2	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 3314.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	79	399	5								483
0.50-0.99		1141	587	31	3	1					1763
1.00-1.49			387	29	2						426
1.50-1.99			120	31		2					153
2.00-2.49				9							9
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	79	1540	1099	100	11	5	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2655.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	190	1227	32	4							1453
0.50-0.99		2015	333	29	4	1	1				2383
1.00-1.49			382	16	6						404
1.50-1.99			91	8	1						100
2.00-2.49				3							3
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	190	3242	838	60	11	1	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4068.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	359	2881	52	4	2	1	.	.	.	.	3299
0.50-0.99	.	3575	235	12	3	3	.	.	.	.	3838
1.00-1.49	.	.	706	1	1	1	.	.	.	.	726
1.50-1.99	.	.	117	3	.	.	.	.	.	.	119
2.00-2.49	.	.	.	1	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	359	6456	1111	40	13	8	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7474.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	252	1706	19	2	1	.	.	.	.	.	1979
0.50-0.99	.	4924	936	8	1	.	.	.	.	.	5869
1.00-1.49	.	.	1810	4	2	.	.	.	.	.	1816
1.50-1.99	.	.	599	57	.	.	1	.	.	.	657
2.00-2.49	.	.	1	60	.	.	.	.	.	.	61
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	252	6630	3365	134	3	0	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 9718.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	159	790	13	6	3	1	1	.	.	.	973
0.50-0.99	.	4370	1267	4	2	2	.	.	.	.	5645
1.00-1.49	.	.	1090	1	1	.	.	.	.	.	1091
1.50-1.99	.	.	576	74	.	.	.	.	.	.	650
2.00-2.49	.	.	.	43	.	.	.	.	.	.	43
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	159	5160	2946	131	6	3	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 7867.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	128	883	14	6	2	.	.	.	.	.	1033
0.50-0.99	.	2349	438	3	3	1	.	.	.	.	2794
1.00-1.49	.	.	467	1	1	.	.	.	.	.	468
1.50-1.99	.	.	172	14	.	.	.	.	.	.	186
2.00-2.49	.	.	1	7	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	128	3232	1092	30	6	1	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 4203.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	142	889	13	4	2	.	.	.	.	.	1050
0.50-0.99	.	1586	133	.	3	2	.	.	.	.	1732
1.00-1.49	.	.	372	.	1	.	.	.	.	.	373
1.50-1.99	.	.	54	.	.	.	.	.	.	.	54
2.00-2.49	.	.	1	2	.	.	.	.	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	142	2475	573	14	4	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 3008.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	97	690	7	6	1	.	.	.	.	.	801
0.50-0.99	.	1417	273	9	3	1	1	.	.	.	1704
1.00-1.49	.	.	379	1	2	.	.	1	.	.	383
1.50-1.99	.	.	96	14	.	.	1	.	.	.	111
2.00-2.49	.	.	1	6	.	.	.	.	.	.	7
2.50-2.99	0
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	97	2107	756	36	7	1	2	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2818.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	78	574	7	2	2	.	.	.	.	.	661
0.50-0.99	.	1960	644	22	5	2	.	.	.	.	2633
1.00-1.49	.	.	623	3	5	.	.	.	.	.	631
1.50-1.99	.	.	340	44	.	2	.	.	.	.	386
2.00-2.49	.	.	.	36	.	.	.	.	.	.	36
2.50-2.99	.	.	.	12	.	.	.	.	.	.	12
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	78	2534	1614	117	13	4	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4083.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	65	459	6	2	.	.	.	.	.	.	532
0.50-0.99	.	1849	911	28	6	2	.	.	.	.	2796
1.00-1.49	.	.	982	6	4	1	.	.	.	.	993
1.50-1.99	.	.	489	308	1	2	.	.	.	.	800
2.00-2.49	.	.	.	179	.	.	.	.	.	.	179
2.50-2.99	.	.	.	16	4	.	.	.	.	.	20
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	65	2308	2388	539	17	5	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4983.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	109	325	16	3	1						454
0.50-0.99		1606	1271	50	19	4					2950
1.00-1.49			856	9	16	13	1				995
1.50-1.99			378	1	8	2	1				814
2.00-2.49			1	206	1		1	1			208
2.50-2.99				42	8						50
3.00-3.49					8						8
3.50-3.99					1						1
4.00-4.49						1					0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	109	1931	2622	734	54	26	4	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 5133.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	121	614	8	3							746
0.50-0.99		1897	2598	93	17	1					4606
1.00-1.49			1841	20	36	19	2				1918
1.50-1.99			472	636	10	34	2				1154
2.00-2.49				687	1	1	2	1			691
2.50-2.99				142	119	1	1	1	1		265
3.00-3.49				1	106						107
3.50-3.99					14	18					32
4.00-4.49						6					6
4.50-4.99						4					4
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	121	2511	4919	1582	302	84	7	2	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 8922.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	102	660	1	1	1						765
0.50-0.99		1220	3269	95	16	1					4601
1.00-1.49			4149	85	84	24					4343
1.50-1.99			773	1589	187	165	18				2732
2.00-2.49				2176	3	74	26				2287
2.50-2.99				590	329	14	28	6			997
3.00-3.49				4	314	14	38	22	4		334
3.50-3.99					57	32	5	8	2	1	91
4.00-4.49					2	29		1	2		33
4.50-4.99						8					8
5.00-5.49						2	1				3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	102	1880	8192	4540	995	349	90	37	9	1	

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 15159.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

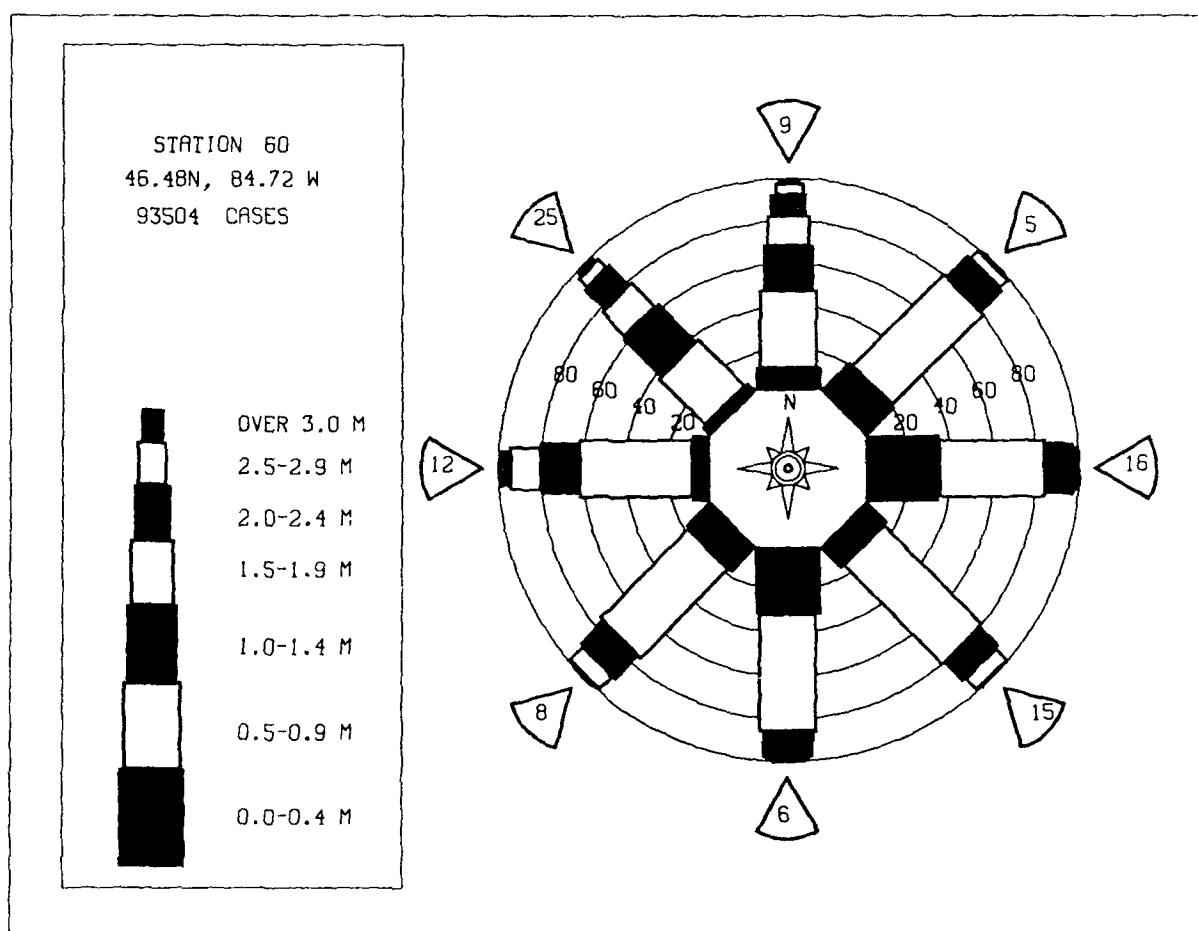
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	59	244	8	2	1						314
0.50-0.99		573	945	43	7						1568
1.00-1.49			1177	69	34	1					1281
1.50-1.99				617	104	69					1014
2.00-2.49			219	642	66	85	18				811
2.50-2.99				178	234	45	50	22	3		532
3.00-3.49				4	96	22	18	21	11		172
3.50-3.99					5	28	2	5	10	2	52
4.00-4.49					4	16	5	3			30
4.50-4.99						1	1				3
5.00-5.49								1			0
5.50-5.99											1
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	59	817	2349	1555	551	267	99	53	27	2	

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 5421.

STATION S60 46.48N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	212	1324	22	4	1	.	.	.	.	.	1563
0.50-0.99	.	3223	1559	51	10	2	.	.	.	.	4845
1.00-1.49	.	.	1691	43	23	6	.	.	.	.	1723
1.50-1.99	.	.	470	459	36	31	3	.	.	.	999
2.00-2.49	.	.	.	456	17	20	5	1	.	.	499
2.50-2.99	.	.	.	101	92	7	9	5	.	.	214
3.00-3.49	.	.	.	1	58	3	2	3	1	.	68
3.50-3.99	8	8	.	.	1	.	17
4.00-4.49	5	.	.	.	.	5
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	212	4547	3742	1115	245	83	19	9	2	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S60 (46.48N 84.72W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.1	1.0	1.0	0.9	0.7	0.6	0.6	0.8	0.9	1.1	1.1	0.9
1957	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.9	0.9	1.1	1.1	1.0
1958	1.1	1.5	1.0	1.0	1.0	0.9	0.7	0.8	0.9	1.0	1.4	1.1	1.0
1959	1.4	1.3	1.1	1.0	1.1	0.9	0.7	0.7	0.9	1.0	1.3	1.2	1.0
1960	1.2	1.5	1.1	0.9	0.8	0.7	0.7	0.7	0.8	1.0	1.2	1.2	1.0
1961	1.0	1.0	1.2	0.9	1.0	0.7	0.7	0.7	0.9	1.0	1.2	1.1	1.0
1962	1.3	1.0	0.8	0.9	0.7	0.6	0.7	0.6	0.9	0.8	0.8	1.2	0.9
1963	0.9	1.1	1.4	1.0	0.8	0.6	0.7	0.7	0.7	0.7	1.2	1.1	0.9
1964	1.4	1.2	1.4	1.0	1.0	0.8	0.7	0.9	1.0	1.1	1.2	1.1	1.1
1965	1.4	1.5	1.0	0.8	0.9	0.8	0.8	0.8	0.8	1.3	1.3	1.1	1.1
1966	1.4	1.3	1.4	1.1	1.2	0.8	0.9	0.8	1.1	1.2	1.3	1.2	1.2
1967	1.4	1.4	1.2	1.1	1.0	0.7	0.7	0.7	0.9	1.0	1.2	1.1	1.1
1968	1.2	1.7	1.3	1.1	1.0	0.7	0.8	0.8	0.8	1.0	1.3	1.3	1.1
1969	1.3	1.2	1.3	0.8	0.9	0.8	0.6	0.8	0.9	0.9	1.1	1.2	1.0
1970	1.0	1.2	1.2	0.9	0.8	0.7	0.6	0.7	1.1	1.0	1.2	1.1	1.0
1971	1.4	1.1	1.3	1.0	0.8	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.0
1972	1.4	1.1	1.2	0.8	0.7	0.8	0.7	0.6	1.0	1.1	0.9	1.1	1.0
1973	1.3	1.1	1.2	1.1	1.0	0.7	0.6	0.6	0.9	0.9	1.3	1.1	1.0
1974	1.1	1.1	1.3	0.9	0.9	0.7	0.7	0.6	0.9	1.1	1.0	1.0	0.9
1975	1.2	1.0	1.2	1.0	0.6	0.6	0.7	0.8	0.8	1.0	1.1	1.0	0.9
1976	1.3	1.2	1.3	0.9	0.9	0.6	0.8	0.7	1.0	1.0	1.3	1.3	1.0
1977	1.2	1.4	1.2	0.9	0.8	0.8	0.7	0.8	0.8	1.0	1.0	1.1	1.0
1978	1.3	0.9	1.0	1.0	0.7	0.7	0.6	0.7	0.8	1.0	1.0	1.1	0.9
1979	1.2	1.0	1.1	0.9	0.8	0.7	0.6	0.7	0.8	0.9	1.0	1.3	0.9
1980	1.3	0.9	1.3	0.9	0.8	0.7	0.6	0.6	0.9	1.1	1.2	1.3	1.0
1981	1.0	1.1	1.2	1.0	0.8	0.7	0.6	0.5	0.9	0.9	1.1	1.1	0.9
1982	1.3	1.0	1.3	1.0	0.6	0.7	0.6	0.7	0.8	0.9	1.1	1.1	0.9
1983	1.2	1.0	1.1	0.9	0.9	0.6	0.6	0.6	0.8	0.9	1.2	1.0	0.9
1984	1.0	1.1	1.1	0.9	0.9	0.7	0.6	0.5	0.8	0.8	1.1	1.3	0.9
1985	1.1	1.1	1.1	0.8	0.7	0.7	0.5	0.5	0.7	0.9	1.0	1.0	0.9
1986	1.2	1.0	1.1	1.0	0.7	0.7	0.6	0.7	0.8	0.8	1.2	1.1	0.9
1987	1.1	1.0	1.0	0.9	0.7	0.7	0.6	0.7	0.7	0.9	1.1	1.0	0.9
MEAN	1.2	1.2	1.2	1.0	0.8	0.7	0.7	0.7	0.9	1.0	1.2	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S60 (46.48N 84.72W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.5	3.4	3.7	2.8	2.4	2.3	2.0	2.1	2.6	3.3	3.7	3.3	
1957	3.6	3.4	2.8	2.8	2.7	2.9	2.8	2.3	3.6	3.6	4.0	4.1	
1958	3.7	4.3	2.4	2.8	2.4	2.9	2.8	2.3	3.6	3.6	4.6	3.3	
1959	3.4	2.7	3.6	2.8	2.8	2.4	1.1	2.2	3.3	3.3	3.4	4.3	
1960	3.9	3.2	2.8	2.8	2.3	1.8	2.2	2.2	3.3	3.3	3.7	3.4	
1961	3.7	2.4	3.2	2.8	2.7	2.3	2.4	2.6	3.3	3.3	3.3	3.8	
1962	3.9	2.4	2.4	2.4	1.9	2.2	2.2	1.7	3.3	3.3	2.6	3.8	
1963	2.8	2.9	2.9	2.4	2.8	1.1	3.3	2.2	3.3	3.3	4.4	3.3	
1964	4.0	4.4	4.4	3.3	3.3	2.3	2.2	2.2	3.3	3.3	4.0	3.3	
1965	3.3	3.3	3.3	3.3	3.3	2.4	3.3	3.3	3.3	3.3	3.3	3.3	
1966	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1967	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1968	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1969	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1970	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1971	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1972	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1973	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1974	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1975	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1976	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1977	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1978	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1979	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1980	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1981	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1982	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1983	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1984	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1985	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1986	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1987	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S60

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.1
LARGEST WAVE HS (METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	343.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	65022609

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	290	13	6							393
0.50-0.99		775	706	25	8	5					1519
1.00-1.49			978	93	16	1	2				1090
1.50-1.99			125	473	54	23	4				675
2.00-2.49				372	34	27	4	1			438
2.50-2.99				29	52	34	1	2			118
3.00-3.49					10	9	5	1	1		26
3.50-3.99						2	2	1			5
4.00-4.49							1	1			2
4.50-4.99								1			1
5.00-5.49									1		1
5.50-5.99									1		1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	84	1065	1822	998	174	101	15	7	3	0	J

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 4005.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	105	421	10	5	2						543
0.50-0.99		1112	721	29	11	16					1889
1.00-1.49			676	49	5	2	1				733
1.50-1.99			125	148	22	7	1				303
2.00-2.49				79	8	5	1				93
2.50-2.99				2	16	5	1				24
3.00-3.49					1	1					2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	105	1533	1532	312	65	36	4	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 3364.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	101	469	9	5							584
0.50-0.99		1288	487	35	17	13					1840
1.00-1.49			374	25	3	6					408
1.50-1.99			128	22	2	1					153
2.00-2.49				6							6
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	101	1757	998	93	22	20	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2804.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	221	1285	32	16	5	1					1560
0.50-0.99		1934	289	25	22	12	1				2283
1.00-1.49			339	10	2	2	1				354
1.50-1.99			81	3	1						85
2.00-2.49				2							2
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	221	3219	741	56	30	15	2	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4012.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	391	2814	38	38	7	2	.	.	.	.	3290
0.50-0.99	.	3242	175	16	19	16	.	.	.	.	3468
1.00-1.49	.	.	651	5	4	3	1	.	.	.	664
1.50-1.99	.	.	106	1	.	.	.	.	.	.	107
2.00-2.49	.	.	2	1	.	.	.	.	.	.	3
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	391	6056	972	62	30	21	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 7050.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	280	1792	18	28	7	.	.	.	.	.	2125
0.50-0.99	.	4332	1070	12	16	12	.	.	.	.	5442
1.00-1.49	.	.	1404	4	4	2	.	.	.	.	1410
1.50-1.99	.	.	739	112	.	.	.	.	.	.	851
2.00-2.49	.	.	2	62	.	.	.	.	.	.	64
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	280	6124	3233	218	27	14	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 9259.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	147	789	12	10	1	.	.	.	.	.	959
0.50-0.99	.	3801	1002	6	11	9	.	.	.	.	4829
1.00-1.49	.	.	903	1	.	.	.	.	.	.	904
1.50-1.99	.	.	454	48	.	.	.	.	.	.	502
2.00-2.49	.	.	.	32	.	.	.	.	.	.	32
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	147	4590	2371	99	13	9	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 6766.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	103	797	6	8	.	.	.	.	.	.	914
0.50-0.99	.	2767	955	4	4	3	.	.	.	.	3733
1.00-1.49	.	.	696	2	1	.	.	.	.	.	699
1.50-1.99	.	.	248	78	.	.	.	.	.	.	326
2.00-2.49	.	.	1	31	.	.	.	.	.	.	32
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	103	3564	1906	124	5	3	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 5339.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	88	396	7	3	2	.	.	.	.	.	496
0.50-0.99	.	1434	1106	4	2	6	.	.	.	.	2552
1.00-1.49	.	.	643	1	.	.	.	.	.	.	644
1.50-1.99	.	.	144	121	.	.	.	.	.	.	265
2.00-2.49	.	.	.	44	.	.	.	.	.	.	44
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	88	1830	1900	177	5	6	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3753.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	96	356	6	4	1	.	.	.	.	.	463
0.50-0.99	.	876	1165	7	5	2	1	.	.	.	2056
1.00-1.49	.	.	964	1	1	.	.	1	.	.	967
1.50-1.99	.	.	118	213	.	.	.	.	.	.	331
2.00-2.49	.	.	.	144	.	.	.	.	.	.	144
2.50-2.99	.	.	.	18	6	.	.	.	.	.	24
3.00-3.49	4	.	.	.	.	.	4
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	96	1232	2253	387	17	4	1	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 3739.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	82	394	4	4	1	.	.	.	.	.	485
0.50-0.99	.	656	1358	22	9	4	.	.	.	.	2049
1.00-1.49	.	.	1383	.	6	.	.	.	.	.	1389
1.50-1.99	.	.	132	396	.	.	.	.	.	.	528
2.00-2.49	.	.	.	364	.	.	.	.	.	.	364
2.50-2.99	.	.	.	28	54	.	.	.	.	.	82
3.00-3.49	21	.	.	.	.	.	21
3.50-3.99	1	4	.	.	.	.	5
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	82	1050	2877	814	92	9	0	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 4613.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	68	339	6	3	.	.	.	.	.	.	416
0.50-0.99	.	887	1209	28	9	1	1	.	.	.	2135
1.00-1.49	.	.	1165	6	5	5	.	.	.	.	1181
1.50-1.99	.	.	308	543	1	.	.	.	.	.	852
2.00-2.49	.	.	.	322	.	.	.	.	.	.	322
2.50-2.99	.	.	.	41	21	.	.	.	.	.	62
3.00-3.49	10	.	.	.	.	.	10
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	68	1226	2688	943	46	7	1	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 4664.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) -270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4770.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) \approx 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 9321.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.3 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 15312.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

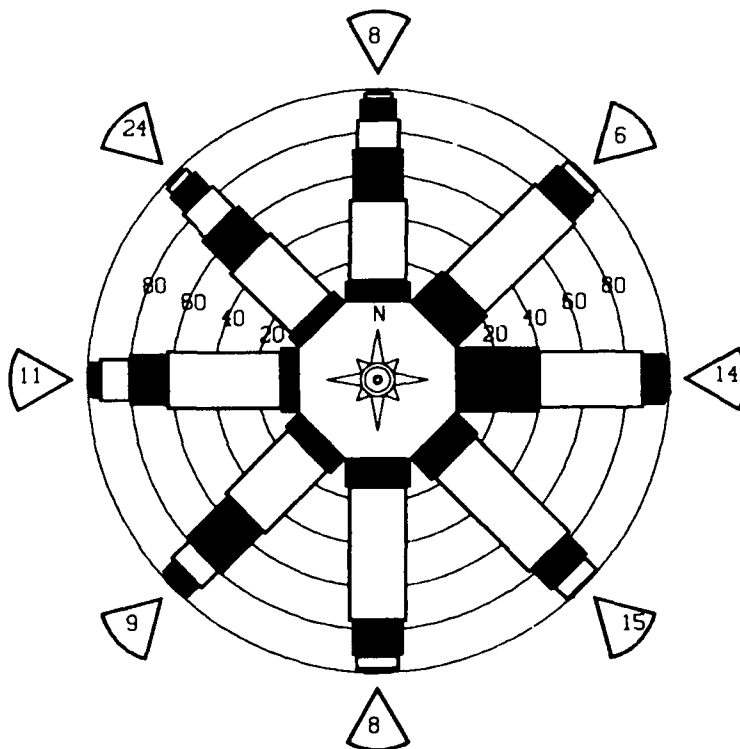
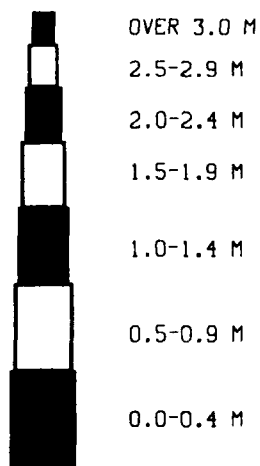
MEAN HS(M) = 1.3 LARGEST HS(M) = 5.8 MEAN TP(SEC) = 4.8 NO. OF CASES = 4733.

STATION S61 46.63N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	226	1233	23	18	4	15	.	.	.	.	1504
0.50-0.99	.	3190	1667	102	23	10	.	.	.	.	4997
1.00-1.49	.	.	1468	210	52	1	.	.	.	.	1741
1.50-1.99	.	.	473	414	113	37	2	.	.	.	1039
2.00-2.49	.	.	9	264	73	99	15	4	1	.	465
2.50-2.99	.	.	.	42	26	53	29	10	4	.	164
3.00-3.49	.	.	.	3	11	7	14	11	2	.	50
3.50-3.99	2	1	1	2	1	.	8
4.00-4.49	1	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	226	4423	3640	1053	304	222	62	28	12	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 61
46.63N, 84.72 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S61 (46.63N 84.72W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.1	1.0	1.0	0.8	0.7	0.6	0.6	0.8	0.9	1.2	1.1	0.9
1957	1.3	1.1	1.1	1.1	0.9	0.9	0.7	0.7	0.9	1.1	1.4	1.3	1.0
1958	1.1	1.1	1.1	1.1	1.0	0.9	0.7	0.8	1.0	1.1	1.4	1.1	1.0
1959	1.4	1.1	1.1	1.1	1.0	0.8	0.7	0.7	0.9	1.1	1.3	1.1	1.0
1960	1.2	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	1.1	1.2	1.1	0.9
1961	1.0	1.1	1.0	1.2	0.9	0.7	0.6	0.7	1.0	1.1	1.1	1.1	0.9
1962	1.0	1.1	1.0	0.8	0.9	0.7	0.6	0.6	0.9	0.8	1.1	1.1	0.9
1963	1.0	1.1	1.1	1.0	1.0	0.8	0.6	0.7	0.7	0.8	1.1	1.1	0.9
1964	1.4	1.1	1.1	1.3	1.0	0.8	0.7	0.9	1.0	1.1	1.1	1.1	0.9
1965	1.4	1.1	1.1	1.1	0.8	0.9	0.8	0.8	0.9	1.1	1.1	1.1	0.9
1966	1.4	1.1	1.1	1.4	1.1	0.8	0.9	0.8	1.1	1.3	1.1	1.1	0.9
1967	1.4	1.1	1.1	1.2	1.0	0.7	0.7	0.7	0.9	1.1	1.1	1.1	0.9
1968	1.1	1.1	1.1	1.2	1.1	0.9	0.7	0.8	0.8	1.1	1.1	1.1	0.9
1969	1.3	1.1	1.1	1.3	0.8	0.8	0.8	0.8	0.9	1.1	1.1	1.1	0.9
1970	1.1	1.1	1.1	1.2	0.9	0.8	0.7	0.6	1.0	1.1	1.1	1.1	0.9
1971	1.4	1.1	1.1	1.3	1.0	0.8	0.6	0.7	0.8	1.1	1.1	1.1	0.9
1972	1.4	1.1	1.1	1.2	0.8	0.6	0.7	0.6	1.0	1.2	1.1	1.1	0.9
1973	1.3	1.1	1.1	1.1	1.1	0.7	0.6	0.6	0.9	1.1	1.1	1.1	0.9
1974	1.1	1.1	1.1	1.3	0.9	0.8	0.7	0.6	0.9	1.1	1.1	1.1	0.9
1975	1.2	1.1	1.1	1.1	1.0	0.7	0.7	0.7	0.8	1.1	1.1	1.1	0.9
1976	1.3	1.1	1.1	1.3	0.9	0.8	0.7	0.7	1.0	1.1	1.1	1.1	0.9
1977	1.2	1.1	1.1	1.1	0.8	0.8	0.7	0.7	0.8	1.1	1.1	1.1	0.9
1978	1.2	1.1	1.1	1.0	0.9	0.7	0.7	0.7	0.8	1.1	1.1	1.1	0.9
1979	1.2	1.1	1.1	1.1	0.8	0.7	0.7	0.7	0.8	1.1	1.1	1.1	0.9
1980	1.1	1.1	1.1	1.2	0.8	0.7	0.7	0.6	0.9	1.1	1.1	1.1	0.9
1981	0.9	1.1	1.1	1.1	0.9	0.7	0.6	0.5	0.8	1.1	1.1	1.1	0.9
1982	1.2	1.1	1.1	1.2	0.8	0.6	0.6	0.6	0.8	1.1	1.1	1.1	0.9
1983	1.1	1.1	1.1	1.1	0.8	0.6	0.6	0.6	0.8	1.1	1.1	1.1	0.9
1984	1.0	1.1	1.1	1.1	0.8	0.7	0.6	0.5	0.8	1.1	1.1	1.1	0.9
1985	1.1	1.1	1.1	1.1	0.8	0.7	0.6	0.5	0.8	1.1	1.1	1.1	0.9
1986	1.1	1.1	1.1	1.1	0.8	0.7	0.6	0.5	0.8	1.1	1.1	1.1	0.9
1987	1.1	1.1	1.1	1.1	0.8	0.7	0.6	0.5	0.8	1.1	1.1	1.1	0.9
MEAN	1.2	1.1	1.1	0.9	0.8	0.7	0.7	0.7	0.9	1.0	1.2	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S61 (46.63N 84.72W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.6	3.3	3.2	2.6	2.4	2.3	1.7	1.9	2.6	3.3	3.3	2.6	
1957	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1958	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1959	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1960	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1961	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1962	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1963	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1964	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1965	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1966	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1967	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1968	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1969	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1970	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1971	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1972	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1973	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1974	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1975	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1976	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1977	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1978	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1979	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1980	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1981	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1982	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1983	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1984	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1985	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1986	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1987	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S61

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	315.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	5.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	341.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	65022609

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	22	180	23	4	17	2	.	.	.	.	229
0.50-0.99	.	612	627	94	17	.	.	.	.	.	1352
1.00-1.49	.	.	412	164	101	35	.	.	.	.	712
1.50-1.99	.	.	219	121	101	78	8	.	.	.	527
2.00-2.49	.	.	9	121	45	94	17	2	.	.	288
2.50-2.99	.	.	.	21	10	50	44	12	1	.	138
3.00-3.49	.	.	.	1	1	13	10	10	2	.	37
3.50-3.99	2	5	2	.	9
4.00-4.49	1	1	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	22	792	1290	526	275	272	81	30	6	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 3097.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	42	203	18	122	34	4	.	.	.	.	263
0.50-0.99	.	776	676	122	34	4	.	.	.	.	1612
1.00-1.49	.	.	413	99	104	29	2	.	.	.	647
1.50-1.99	.	.	165	50	43	64	13	1	.	.	336
2.00-2.49	.	.	7	53	12	19	21	7	.	.	112
2.50-2.99	.	.	.	9	.	7	7	7	1	.	31
3.00-3.49	.	.	.	1	.	3	1	4	1	.	10
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	42	979	1279	334	193	126	44	12	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 2830.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	44	272	26	1	23	5	.	.	.	.	343
0.50-0.99	.	1070	427	124	23	5	.	.	.	.	1649
1.00-1.49	.	.	289	44	57	37	4	.	.	.	431
1.50-1.99	.	.	155	19	4	33	6	1	.	.	218
2.00-2.49	.	.	.	9	1	.	.	.	.	.	10
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	44	1342	897	198	85	75	10	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 2489.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	122	949	77	7	25	1	1	.	.	.	1155
0.50-0.99	.	1726	288	82	25	1	1	.	.	.	2123
1.00-1.49	.	.	339	19	27	10	2	.	.	.	397
1.50-1.99	.	.	98	2	3	5	1	2	.	.	111
2.00-2.49	.	.	.	3	.	.	.	.	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	122	2675	802	113	55	16	4	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3550.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	225	2083	118	7	9	1	.	.	.	.	2433
0.50-0.99	.	2865	212	94	9	1	.	.	.	.	3181
1.00-1.49	.	.	675	7	9	5	.	1	.	.	697
1.50-1.99	.	.	111	1	1	2	.	.	.	.	114
2.00-2.49	.	.	2	1	.	1	.	.	.	.	4
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	225	4948	1118	110	19	9	0	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 6019.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	137	1116	36	4	2	.	.	.	.	.	1295
0.50-0.99	.	3640	864	43	11	.	.	.	.	.	4558
1.00-1.49	.	.	1574	1	7	4	1	.	.	.	1587
1.50-1.99	.	.	624	75	.	1	1	1	.	.	702
2.00-2.49	.	.	1	52	.	1	.	.	.	.	54
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	137	4756	3099	179	20	6	2	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7675.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	52	426	11	3	.	.	.	.	.	.	492
0.50-0.99	.	2655	822	20	5	1	.	.	.	.	3503
1.00-1.49	.	.	853	2	2	1	.	.	.	.	858
1.50-1.99	.	.	444	54	.	1	.	.	.	.	499
2.00-2.49	.	.	.	34	.	.	.	.	.	.	34
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	52	3081	2130	115	7	3	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5044.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	54	555	9	2	.	.	.	.	.	.	620
0.50-0.99	.	2169	660	18	3	.	.	.	.	.	2850
1.00-1.49	.	.	520	2	2	.	.	.	.	.	524
1.50-1.99	.	.	229	21	.	.	.	.	.	.	250
2.00-2.49	.	.	1	9	.	.	.	.	.	.	10
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	54	2724	1419	51	5	2	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3985.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	47	558	7	5	.	.	.	.	.	.	612
0.50-0.99	.	1371	284	1	1	.	.	.	.	.	1660
1.00-1.49	.	.	406	4	.	.	1	.	.	.	408
1.50-1.99	.	.	83	.	.	.	.	.	.	.	88
2.00-2.49	.	.	2	.	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	47	1929	782	10	1	0	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2593.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	58	499	3	7	4	.	.	.	.	.	560
0.50-0.99	.	1179	427	32	1	.	.	.	.	.	1617
1.00-1.49	.	.	574	84	.	.	.	.	.	.	607
1.50-1.99	.	.	137	43	1	.	.	.	.	.	221
2.00-2.49	.	.	11	4	6	.	.	.	.	.	55
2.50-2.99	3	.	.	.	.	.	10
3.00-3.49	1	.	.	.	.	3
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	58	1678	1152	170	14	2	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 2882.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	47	502	9	1	11	3	.	.	.	.	559
0.50-0.99	.	1178	797	10	8	3	.	.	.	.	1999
1.00-1.49	.	.	972	25	8	.	.	.	.	.	1008
1.50-1.99	.	.	158	268	1	2	.	.	.	.	428
2.00-2.49	.	.	.	189	25	.	.	.	.	.	190
2.50-2.99	.	.	.	31	18	.	.	.	.	.	56
3.00-3.49	2	1	.	.	.	.	18
3.50-3.99	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	47	1680	1936	524	65	9	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3992.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	48	453	103	59	6	.	.	.	.	.	669
0.50-0.99	.	1007	1098	188	155	22	.	.	.	.	2470
1.00-1.49	.	.	915	80	47	14	.	.	.	.	1056
1.50-1.99	.	.	158	298	42	7	.	.	.	.	511
2.00-2.49	.	.	.	251	20	13	.	.	.	.	278
2.50-2.99	.	.	.	28	45	5	.	.	.	.	78
3.00-3.49	16	11	2	.	.	.	29
3.50-3.99	7	1	.	.	.	8
4.00-4.49	0
4.50-4.99	1	1	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	48	1460	2274	904	331	80	4	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 4782.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	48	537	241	20	2						848
0.50-0.99		899	2388	762	70	7	1	1			4128
1.00-1.49			1039	817	241	19	1	1	1		2119
1.50-1.99			166	507	293	55					1021
2.00-2.49			2	287	136	128	5				558
2.50-2.99				12	280	103	32	4			431
3.00-3.49					43	229	26	7	1		306
3.50-3.99					4	143	59	13	2		221
4.00-4.49						11	86	36			133
4.50-4.99							14	43	1		58
5.00-5.49							1	27	2		30
5.50-5.99								6	11	1	18
6.00-6.49									10	1	11
6.50-6.99									2		2
7.00+											0
TOTAL	48	1436	3836	2405	1069	695	225	138	30	2	

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.0 NO. OF CASES= 9266.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	52	713	272	25	6	2					1070
0.50-0.99		1145	4424	926	157	26	2	1			6681
1.00-1.49			1776	1597	419	86	4	2	4	1	3889
1.50-1.99			234	1013	401	157	6	4	2		1817
2.00-2.49				542	228	175	22	3	2	1	973
2.50-2.99				40	533	105	25	24	1	1	729
3.00-3.49				1	102	424	13	14	1		555
3.50-3.99					4	311	56	17	1		389
4.00-4.49						65	146	22	1		234
4.50-4.99						9	91	94	6	2	202
5.00-5.49							14	68	11		93
5.50-5.99							1	32	36		69
6.00-6.49								7	26		33
6.50-6.99									17	5	22
7.00+									7	20	27
TOTAL	52	1858	6706	4144	1850	1360	380	288	115	30	

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 5.2 NO. OF CASES= 15720.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	43	376	143	10							572
0.50-0.99		768	3185	864	73	2	1				4893
1.00-1.49			1718	1436	382	67					3603
1.50-1.99			258	1844	482	142	12	1			2539
2.00-2.49			2	858	467	203	25	4			1559
2.50-2.99				26	951	132	29	16			1154
3.00-3.49				1	126	127	17	18	2		891
3.50-3.99					1	496	13	7	2		579
4.00-4.49						66	242	24	9		341
4.50-4.99						2	95	84	13		194
5.00-5.49							13	77	20		110
5.50-5.99							1	27	23		51
6.00-6.49								5	21	1	27
6.50-6.99								2	14	5	21
7.00+									4	9	13
TOTAL	43	1144	5306	4839	2482	1837	508	265	108	15	

MEAN HS(M) = 1.7 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 5.5 NO. OF CASES= 15499.

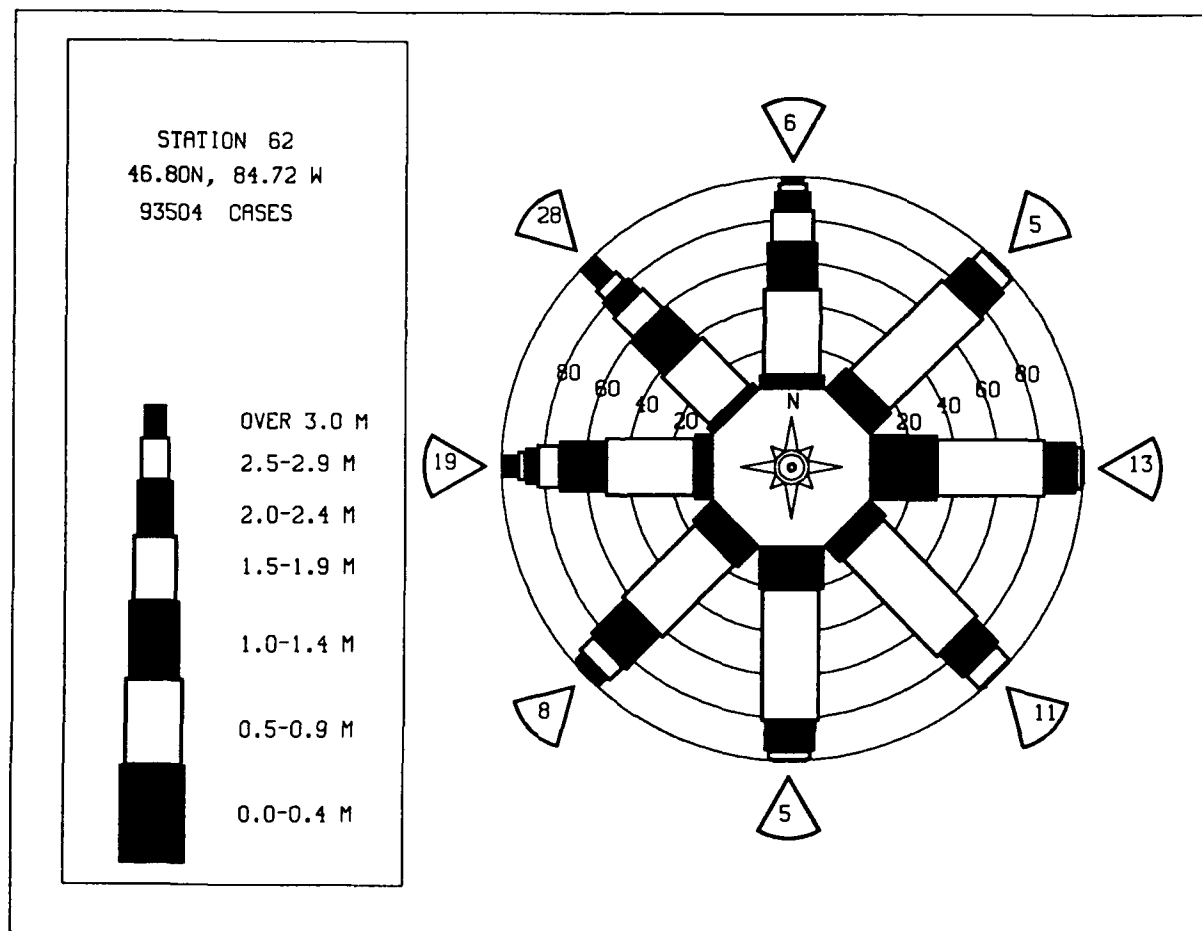
STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	29	136	10								175
0.50-0.99		483	753	68	8						1312
1.00-1.49			535	250	63	17	1				866
1.50-1.99			220	290	154	50	2				716
2.00-2.49			6	192	121	126	11	1			457
2.50-2.99				27	162	95	28	7			319
3.00-3.49				2	27	135	35	16			215
3.50-3.99					1	98	24	7	2		132
4.00-4.49						11	58	7	7	1	84
4.50-4.99							12	22	3		37
5.00-5.49							2	9	2		13
5.50-5.99								3	5		8
6.00-6.49									2	3	5
6.50-6.99									2		2
7.00+											0
TOTAL	29	619	1524	829	536	532	173	72	23	4	

MEAN HS(M) = 1.6 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.2 NO. OF CASES= 4081.

STATION S62 46.80N 84.72W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-	4.0-	5.0-	6.0-	7.0-	8.0-	9.0-	10.0-	11.0-
		3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	LONGER
0.00-0.49	107	956	111	14	1	7	.	.	.	.
0.50-0.99	.	2355	1794	343	61	33	.	.	.	.
1.00-1.49	.	.	1301	457	147	60	.	.	.	.
1.50-1.99	.	.	346	445	132	75	106	1	.	.
2.00-2.49	.	.	4	265	103	150	106	7	.	.
2.50-2.99	.	.	.	21	201	154	106	7	.	.
3.00-3.49	33	103	21	5	.	.
3.50-3.99	1	103	21	5	.	.
4.00-4.49	15	21	9	1	.
4.50-4.99	1	21	9	1	.
5.00-5.49	2	18	3	.
5.50-5.99	3	6	1	.
6.00-6.49	1	6	.
6.50-6.99	3	1
7.00+	1	2
TOTAL	107	3311	3556	1545	699	500	140	79	23	3

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S62 (46.80N 84.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	1.3	1.2	1.3	1.0	0.8	0.7	0.7	0.9	1.1	1.3	1.3	1.1
1957	1.7	1.3	1.4	1.1	1.1	1.0	1.0	0.9	1.2	1.1	1.1	1.1	1.1
1958	1.9	2.0	1.2	1.2	1.1	1.0	0.8	0.8	1.0	1.1	1.1	1.1	1.1
1959	1.7	1.1	1.3	1.3	1.0	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1960	1.6	1.1	1.1	1.1	1.1	0.8	0.8	0.7	0.9	1.1	1.1	1.1	1.1
1961	1.2	1.1	1.1	1.1	1.1	0.9	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1962	1.8	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	0.8	0.7	0.7	1.1	1.1	1.1	1.1	1.1
MEAN	1.5	1.4	1.4	1.1	1.0	0.8	0.8	0.8	1.0	1.2	1.4	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S62 (46.80N 84.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.2	5.3	4.4	4.9	3.6	3.3	2.6	2.6	4.1	5.5	5.2	5.3	
1957	5.1	5.7	4.7	3.7	3.4	3.9	5.4	3.1	5.2	4.3	5.4	5.6	
1958	5.8	6.0	4.7	5.4	3.8	3.7	3.0	2.8	4.0	4.3	6.7	4.9	
1959	4.9	5.0	5.9	4.1	4.8	3.8	3.0	2.7	4.6	5.1	6.3	8.9	
1960	5.8	5.2	3.7	4.1	3.2	3.3	3.2	2.5	4.2	5.7	6.1	4.4	
1961	5.1	4.9	5.6	4.2	3.7	3.5	3.3	3.4	4.3	4.5	5.7	7.5	
1962	5.6	4.4	4.9	3.9	3.1	2.5	3.0	2.0	4.1	5.2	5.1	5.9	
1963	5.1	6.2	4.3	6.1	3.8	2.8	3.1	2.6	2.4	4.2	7.7	5.3	
1964	6.8	5.2	6.5	4.0	4.8	3.3	3.3	4.0	5.2	4.1	7.7	5.4	
1965	6.7	6.4	4.6	3.7	3.4	3.4	3.0	4.4	4.4	6.7	7.7	4.7	
1966	8.0	6.2	5.5	4.4	5.3	2.9	3.2	2.9	5.9	7.2	5.5	6.1	
1967	7.0	6.6	6.3	4.4	4.2	2.2	3.2	3.1	4.1	4.6	5.5	5.2	
1968	5.5	8.6	4.9	5.7	3.2	3.1	3.9	3.7	3.4	4.4	6.0	5.3	
1969	4.1	5.7	4.9	3.7	2.9	2.4	2.9	3.7	3.8	4.0	4.9	6.5	
1970	5.4	5.5	4.6	5.0	3.1	3.0	2.2	3.2	4.2	4.7	7.7	6.2	
1971	5.8	7.4	6.6	4.5	3.1	2.0	3.2	3.3	4.3	4.6	4.9	6.5	
1972	8.2	6.6	4.7	3.8	3.0	2.7	2.9	3.1	4.6	8.2	4.8	6.4	
1973	4.8	3.6	5.0	3.2	4.0	2.2	2.5	3.7	5.3	6.2	6.2	3.9	
1974	7.1	7.0	4.7	3.6	4.0	2.8	2.5	3.9	4.8	4.7	7.7	3.1	
1975	4.9	4.8	4.2	3.8	2.8	3.3	3.7	3.1	3.6	4.0	7.4	5.9	
1976	6.7	5.7	6.1	3.4	5.1	2.3	3.5	3.9	4.3	5.7	6.2	7.4	
1977	6.0	6.9	5.9	3.5	2.9	2.7	3.8	3.2	3.8	4.7	5.1	4.0	
1978	6.5	4.0	5.9	4.3	2.9	2.8	2.5	3.1	2.4	3.6	4.9	4.6	
1979	4.9	3.8	4.7	4.3	2.6	2.5	2.2	3.7	3.1	2.5	4.2	4.9	
1980	6.5	3.8	6.7	3.5	3.2	2.5	1.6	1.7	4.5	5.4	5.8	4.9	
1981	3.4	4.2	4.0	3.8	2.2	2.3	2.0	1.8	5.5	5.7	6.2	4.1	
1982	6.6	4.8	7.8	6.6	1.8	2.6	2.5	2.8	4.4	4.9	4.5	4.6	
1983	4.4	3.3	3.5	2.8	2.8	2.6	2.4	2.4	3.5	3.8	4.3	4.7	
1984	5.7	3.7	5.7	2.7	3.6	2.4	2.5	2.1	3.2	4.3	6.1	6.9	
1985	5.2	3.9	4.4	4.6	2.2	4.1	2.1	1.9	3.7	4.0	3.9	5.0	
1986	4.8	4.0	4.9	3.7	3.7	3.3	1.9	3.2	4.2	4.5	4.6	4.5	
1987	6.0	5.1	5.0	5.4	2.9	3.4	3.3	4.4	3.6	3.8	6.5	4.0	

32 YR. STATISTICS FOR WIS STATION S62

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.9
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	8.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	289.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	59120918

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	57	326	53	6	49	14	.	.	.	.	442
0.50-0.99	.	763	273	158	49	87	5	1	.	.	1257
1.00-1.49	.	.	295	130	118	87	5	1	.	.	636
1.50-1.99	.	.	122	33	56	85	22	4	.	.	322
2.00-2.49	.	.	7	4	8	42	29	4	2	.	96
2.50-2.99	8	4	4	1	.	17
3.00-3.49	1	.	.	1
3.50-3.99	1	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	57	1089	750	331	231	236	60	15	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 2606.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	70	279	60	5	.	.	.	.	.	.	414
0.50-0.99	.	912	344	143	59	11	.	.	.	.	1469
1.00-1.49	.	.	283	52	63	56	9	1	.	.	464
1.50-1.99	.	.	137	16	9	36	10	3	.	.	211
2.00-2.49	.	.	7	1	1	2	4	4	1	.	27
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	70	1191	831	225	132	105	23	8	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2429.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	66	379	44	2	.	.	.	.	.	.	491
0.50-0.99	.	1195	437	74	29	19	.	.	.	.	1754
1.00-1.49	.	.	293	11	17	23	4	1	.	.	349
1.50-1.99	.	.	147	16	1	2	.	.	.	.	166
2.00-2.49	.	.	.	5	.	.	1	.	.	.	6
2.50-2.99	.	.	.	1	.	1	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	66	1574	921	109	47	45	5	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2596.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	145	989	73	4	.	.	.	.	.	.	1211
0.50-0.99	.	1639	208	35	12	5	1	.	.	.	1900
1.00-1.49	.	.	341	3	4	1	1	.	.	.	350
1.50-1.99	.	.	93	3	.	.	.	.	.	.	96
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	145	2628	715	45	16	6	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 3331.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	301	1884	74	7							2266
0.50-0.99		2575	134	27	5	3					2744
1.00-1.49			627	1	3						634
1.50-1.99			98		1	1	2				99
2.00-2.49			2	1							3
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	301	4459	935	37	9	4	2	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 5380.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	171	1053	24	6	1						1255
0.50-0.99		3026	734	7	4	1					3772
1.00-1.49			1177		1	1					1179
1.50-1.99			628	95							723
2.00-2.49			1	37		1					39
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	171	4079	2564	147	6	3	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 6523.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	67	510	7	1							585
0.50-0.99		2391	707	3	2	1					3104
1.00-1.49			790	1							791
1.50-1.99			394	41							435
2.00-2.49				32							32
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	67	2901	1898	80	2	1	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4632.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	73	750	10	2							835
0.50-0.99		2508	758			1					3267
1.00-1.49			625	1	1						627
1.50-1.99			253	41			1				295
2.00-2.49			1	28							29
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	73	3258	1647	72	1	1	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 4731.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	64	517	17	.	.	.	.	.	.	.	598
0.50-0.99	.	1640	893	1	.	.	.	.	.	.	2534
1.00-1.49	.	.	527	2	.	.	.	.	.	.	529
1.50-1.99	.	.	150	108	.	.	.	.	.	.	258
2.00-2.49	.	.	.	43	.	.	.	.	.	.	43
2.50-2.99	.	.	.	3	.	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	64	2157	1587	157	0	0	0	0	0	0	3711.

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3711.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	71	411	14	1	1	.	.	.	.	.	498
0.50-0.99	.	1059	1011	2	1	.	.	.	.	.	2073
1.00-1.49	.	.	643	42	4	1	.	.	.	.	690
1.50-1.99	.	.	148	178	.	.	.	.	.	.	326
2.00-2.49	.	.	.	100	1	.	.	.	.	.	101
2.50-2.99	.	.	.	18	6	.	.	.	.	.	24
3.00-3.49	4	.	.	.	.	.	4
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	71	1470	1816	341	17	2	0	0	0	0	3484.

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3484.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	69	568	58	24	.	2	.	.	.	.	719
0.50-0.99	.	972	1348	57	87	2	.	.	.	.	2476
1.00-1.49	.	.	1076	27	16	18	.	.	.	.	1137
1.50-1.99	.	.	173	403	9	2	.	.	.	.	587
2.00-2.49	.	.	.	254	1	5	.	.	.	.	260
2.50-2.99	.	.	.	37	28	.	.	.	.	.	65
3.00-3.49	18	.	.	.	.	.	18
3.50-3.99	1	2	.	.	.	.	3
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	69	1540	2655	812	160	31	0	0	0	0	4935.

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 4935.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	55	473	197	81	.	.	.	.	.	.	806
0.50-0.99	.	788	1696	478	180	7	.	.	.	.	3149
1.00-1.49	.	.	1059	352	158	40	1	.	.	.	1610
1.50-1.99	.	.	148	317	128	40	.	.	.	.	833
2.00-2.49	.	.	.	329	82	47	.	.	.	.	459
2.50-2.99	.	.	.	40	147	7	.	.	.	.	234
3.00-3.49	.	.	.	1	24	7	.	.	.	.	103
3.50-3.99	2	52	12	5	.	.	71
4.00-4.49	3	14	7	1	.	25
4.50-4.99	3	9	.	.	12
5.00-5.49	1	1	.	.	3
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	55	1261	3101	1798	721	302	45	22	3	0	6851.

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 6851.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	81	648	269	1	1						1000
0.50-0.99		868	2983	701	14						4574
1.00-1.49		2	1018	976	211	4					2214
1.50-1.99			152	579	372	84					1187
2.00-2.49				275	170	170	16				632
2.50-2.99				11	294	96	37	14			452
3.00-3.49					51	257	18	12			339
3.50-3.99						158	79	13			251
4.00-4.49						23	85	42			156
4.50-4.99							24	44			77
5.00-5.49							2	35			47
5.50-5.99							1	10			29
6.00-6.49											10
6.50-6.99											9
7.00+											1
TOTAL	81	1518	4422	2543	1113	798	265	172	61	5	

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 5.0 NO. OF CASES= 10287.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	103	926	448	32	3						1512
0.50-0.99		1281	4604	1166	179	18					7248
1.00-1.49			1916	1392	475	127	9	2			3921
1.50-1.99			194	1144	294	177	25	7			1843
2.00-2.49			1	576	265	119	24	14			1000
2.50-2.99				35	648	68	10	20			783
3.00-3.49					112	466	11	8			600
3.50-3.99					4	315	44	6			370
4.00-4.49						78	163	24			265
4.50-4.99						2	101	78			189
5.00-5.49							17	64			100
5.50-5.99							3	28			61
6.00-6.49								9			31
6.50-6.99								2			20
7.00+											26
TOTAL	103	2207	7163	4345	1980	1370	407	262	107	25	

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 5.1 NO. OF CASES= 16826.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	82	426	220	18	4						750
0.50-0.99		1006	2235	671	131	11					4055
1.00-1.49			1392	887	250	137	9				2676
1.50-1.99			193	1261	251	89	33	10			1838
2.00-2.49			5	636	352	101	31	24			1151
2.50-2.99				47	647	106	11	14			828
3.00-3.49					65	505	18	8			599
3.50-3.99					2	286	95	9			394
4.00-4.49						28	119	29			185
4.50-4.99							47	59			123
5.00-5.49							4	18			49
5.50-5.99							1	9			27
6.00-6.49											18
6.50-6.99											5
7.00+											3
TOTAL	82	1432	4045	3520	1702	1263	369	189	86	13	

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 5.3 NO. OF CASES= 11903.

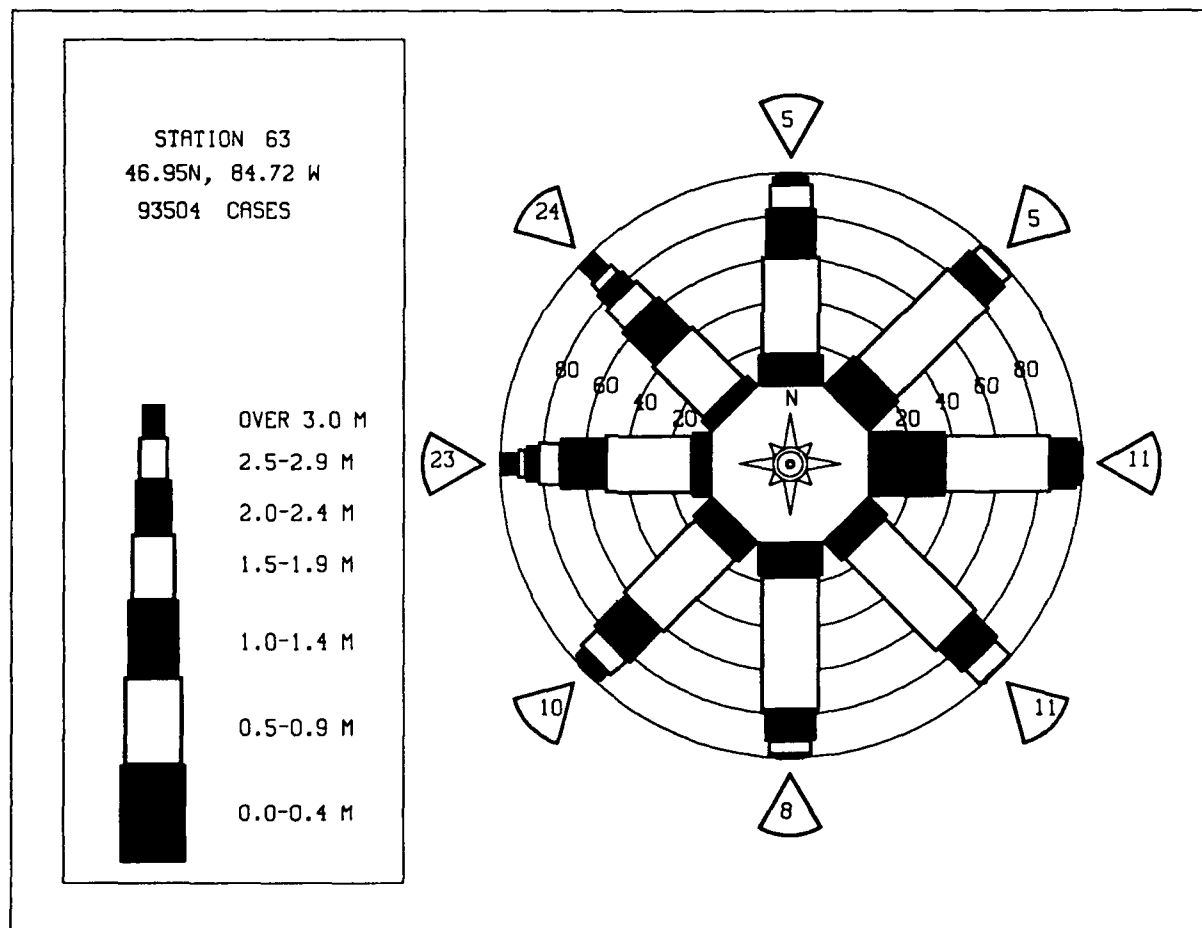
STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	51	318	34	5	1						409
0.50-0.99		663	428	66	22	2					1181
1.00-1.49			410	221	86	39	2				758
1.50-1.99			110	193	115	82	12				512
2.00-2.49			8	103	48	59	26	11			255
2.50-2.99				18	83	24	6	6			137
3.00-3.49					16	71	4	6			98
3.50-3.99						43	23	3			72
4.00-4.49						4	18	11			34
4.50-4.99							2	5			12
5.00-5.49								5			9
5.50-5.99								1			5
6.00-6.49											4
6.50-6.99											0
7.00+											0
TOTAL	51	981	990	606	371	324	93	48	18	4	

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 3279.

STATION S63 46.95N 84.72W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	153	1046	161	19	1	10	.	.	.	.	1380
0.50-0.99	.	2329	1880	360	78	10	.	.	.	.	4657
1.00-1.49	.	.	1247	410	141	54	4	.	.	.	1856
1.50-1.99	.	.	314	463	123	60	10	2	.	.	972
2.00-2.49	.	.	3	243	93	54	13	5	.	.	411
2.50-2.99	.	.	.	21	185	34	7	5	.	.	253
3.00-3.49	29	137	23	5	.	.	174
3.50-3.99	85	23	1	.	.	113
4.00-4.49	14	40	1	.	.	55
4.50-4.99	17	1	.	.	18
5.00-5.49	2	1	.	.	3
5.50-5.99	5	.	.	5
6.00-6.49	2	1	3
6.50-6.99	2
7.00+	1
TOTAL	153	3375	3605	1516	650	448	123	67	21	3	93504

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S63 (46.95N 84.72W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.9	1.3	1.1	1.3	1.0	0.8	0.7	0.7	0.9	1.1	1.3	1.3	1.0
1957	1.1	1.4	1.1	1.1	1.0	1.1	1.0	0.8	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1972	2.0	1.4	1.1	1.1	0.9	0.7	0.8	0.7	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1
MEAN	1.4	1.3	1.3	1.0	0.9	0.8	0.7	0.8	1.0	1.1	1.4	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S63 (46.95N 84.72W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.7	4.0	4.2	4.6	3.4	3.3	2.4	2.6	4.4	5.5	4.4	5.1	
1957	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1958	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1959	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1960	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1965	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1966	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1973	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1974	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1975	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1976	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1977	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1978	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1979	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1980	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1981	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1984	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1985	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S63

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.1
MEAN PEAK WAVE PERIOD	(SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	8.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	283.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59120918

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	39	263	28	2	5	1	.	.	.	.	332
0.50-0.99	.	309	802	50	5	.	.	.	.	.	1167
1.00-1.49	.	.	883	95	79	18	.	.	.	.	1075
1.50-1.99	.	.	188	272	72	57	.	.	.	.	589
2.00-2.49	.	.	.	247	26	49	7	.	.	.	329
2.50-2.99	.	.	.	68	33	47	7	3	.	.	158
3.00-3.49	.	.	.	2	17	14	5	5	.	.	43
3.50-3.99	1	.	1	2	.	.	4
4.00-4.49	2	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	39	572	1901	736	233	186	20	12	0	0	3469

MEAN HS(M) = 1.2 LARGEST HS(M) = 4.2 MEAN TP(SEC) = 4.6 NO. OF CASES = 3469.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	39	258	37	.	.	.	.	.	.	.	334
0.50-0.99	.	302	799	63	8	.	.	.	.	.	1172
1.00-1.49	.	.	750	53	41	7	.	.	.	.	853
1.50-1.99	.	.	101	253	11	22	1	.	.	.	390
2.00-2.49	.	.	.	187	7	11	1	.	.	.	206
2.50-2.99	.	.	.	25	26	3	1	.	.	.	55
3.00-3.49	11	2	1	.	.	.	14
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	39	560	1687	585	105	45	4	0	0	0	2841

MEAN HS(M) = 1.1 LARGEST HS(M) = 3.8 MEAN TP(SEC) = 4.3 NO. OF CASES = 2841.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	84	363	40	1	5	.	.	.	.	.	488
0.50-0.99	.	407	884	50	5	.	.	.	.	.	1346
1.00-1.49	.	.	729	20	13	9	.	.	.	.	771
1.50-1.99	.	.	74	203	4	10	1	.	.	.	292
2.00-2.49	.	.	.	127	2	2	.	.	.	.	131
2.50-2.99	.	.	.	8	5	.	.	.	.	.	13
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	84	770	1727	409	31	21	1	0	0	0	2854

MEAN HS(M) = 0.9 LARGEST HS(M) = 3.5 MEAN TP(SEC) = 4.0 NO. OF CASES = 2854.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	108	710	74	1	.	.	.	.	.	.	893
0.50-0.99	.	853	729	50	1	.	.	.	.	.	1633
1.00-1.49	.	.	427	19	8	4	.	.	.	.	458
1.50-1.99	.	.	69	55	2	2	.	.	.	.	128
2.00-2.49	.	.	.	27	.	.	.	.	.	.	27
2.50-2.99	.	.	.	1	2	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	108	1563	1299	153	13	6	0	0	0	0	2944

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.9 MEAN TP(SEC) = 3.6 NO. OF CASES = 2944.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	176	1373	118	3	1						1671
0.50-0.99		1553	423	47	7	1					2031
1.00-1.49			458	28	5						491
1.50-1.99			115	17	1	1					134
2.00-2.49			4	1							5
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	176	2926	1118	97	14	2	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4058.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	101	782	38	2							923
0.50-0.99		1243	558	19	4	1					1825
1.00-1.49			576	16	2	2					596
1.50-1.99			140	196							336
2.00-2.49			2	197	1						200
2.50-2.99				14	25						39
3.00-3.49											0
3.50-3.99						1					1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	101	2025	1314	444	32	4	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3673.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	65	464	65	1							595
0.50-0.99		920	1179	29	1						2129
1.00-1.49			1124	87		1					1212
1.50-1.99			91	521	7						619
2.00-2.49				401			1				402
2.50-2.99				26	39						65
3.00-3.49					6						6
3.50-3.99						1					1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	65	1384	2459	1065	53	2	1	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 4710.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	87	662	243	10							1002
0.50-0.99		700	2659	83							3442
1.00-1.49			1664	206	3	1					1874
1.50-1.99			129	494	10						633
2.00-2.49				217	10						227
2.50-2.99				8	28						36
3.00-3.49					8	1					9
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	87	1362	4695	1018	59	2	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 6762.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) -180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	102	728	249	4							1083
0.50-0.99		581	2081	79	1						2742
1.00-1.49			792	236	1						1029
1.50-1.99			71	367	17						455
2.00-2.49				155	48						203
2.50-2.99				4	115	1					120
3.00-3.49					10	25					35
3.50-3.99						7					7
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	102	1309	3193	845	192	33	0	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) = 3.7		MEAN TP(SEC) = 4.2		NO. OF CASES = 5313.						

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	100	526	159	5							790
0.50-0.99		517	1454	47	3						2021
1.00-1.49			658	147	21	1					827
1.50-1.99			69	321	10	6					406
2.00-2.49				115	29						144
2.50-2.99				3	65						68
3.00-3.49					10	12					22
3.50-3.99						4					4
4.00-4.49						2					2
4.50-4.99						1					1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	100	1043	2340	638	138	26	0	0	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) = 4.7		MEAN TP(SEC) = 4.1		NO. OF CASES = 4017.						

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) -225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	90	558	290	49							987
0.50-0.99		544	1646	375	73	1	.	.	.	.	2639
1.00-1.49	.	.	730	208	143	31	.	.	.	.	1112
1.50-1.99	.	.	94	391	24	24	.	.	.	.	533
2.00-2.49	.	.		226	34	7	.	.	.	.	267
2.50-2.99	.	.		8	126		.	.	.	.	134
3.00-3.49	.	.			29	6	.	.	.	.	35
3.50-3.99	.	.				11	.	.	.	.	11
4.00-4.49	.	.				3	.	.	.	.	3
4.50-4.99	.	.					1	.	.	.	1
5.00-5.49	.	.				.	.	.	.	.	0
5.50-5.99	.	.				.	.	.	.	.	0
6.00-6.49	.	.				.	.	.	.	.	0
6.50-6.99	.	.				.	.	.	.	.	0
7.00+	.	.				.	.	.	.	.	0
TOTAL	90	1102	2760	1257	429	83	1	0	0	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=		4.5	MEAN TP(SEC)=		4.5	NO. OF CASES=		5362.		

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	89	577	276	6		1					949
0.50-0.99		516	1914	466	27			1			2924
1.00-1.49		1	688	620	161	6					1476
1.50-1.99			56	503	203	39					801
2.00-2.49				250	132	67					449
2.50-2.99				18	258	44	6				326
3.00-3.49					41	126	11				179
3.50-3.99					1	49	19				74
4.00-4.49						8	21	5			40
4.50-4.99							10	1	1		11
5.00-5.49						1	1	2	1		4
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	89	1094	2934	1863	823	341	59	27	3	0	
MEAN HS(M) = 1.2	LARGEST HS(M) = 5.3		MEAN TP(SEC) = 4.8		NO. OF CASES = 6780.						

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	152	838	283		1						1274
0.50-0.99		658	2950	468	13	9	1				4098
1.00-1.49			712	990	128	6	2				1840
1.50-1.99			90	530	320	41	2	2			1883
2.00-2.49				211	175	158	3				548
2.50-2.99				6	245	109	39	1			400
3.00-3.49					47	209	19	23			298
3.50-3.99					1	104	55	11	1		172
4.00-4.49						11	60	19	6		96
4.50-4.99						1	20	42	8		71
5.00-5.49							3	35	7		45
5.50-5.99								4	11		15
6.00-6.49									8	1	9
6.50-6.99										1	1
7.00+											0
TOTAL	152	1496	4035	2205	930	648	204	137	42	2	9234

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 9234.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	157	1124	443	12	2						1738
0.50-0.99		957	4381	935	62	9					6344
1.00-1.49			1264	1488	405	44	2				3203
1.50-1.99			120	720	388	137	5	2			1372
2.00-2.49				434	196	173	19	2			824
2.50-2.99				31	408	85	28	5			557
3.00-3.49					86	266	22	13			388
3.50-3.99					2	208	38	7	3		258
4.00-4.49						54	102	18	4		178
4.50-4.99						3	51	52	4		110
5.00-5.49							5	53	7	1	66
5.50-5.99							1	17	18		36
6.00-6.49								4	16		20
6.50-6.99								1	8	1	10
7.00+										5	9
TOTAL	157	2081	6208	3620	1549	979	273	174	65	7	14154

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.0 NO. OF CASES= 14154.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	78	577	256	11							922
0.50-0.99		647	3193	684	34						4558
1.00-1.49			1546	1101	313	25					2950
1.50-1.99			145	1346	273	121	5				1890
2.00-2.49				671	324	144	17	3			1159
2.50-2.99				25	727	56	36	6			850
3.00-3.49					86	433	19	12			550
3.50-3.99					1	280	37	10			328
4.00-4.49						49	128	20	4		201
4.50-4.99							42	47	4		91
5.00-5.49							7	38	4		49
5.50-5.99							1	11	13		25
6.00-6.49								5	9	1	15
6.50-6.99									4		4
7.00+										2	2
TOTAL	78	1224	5140	3838	1758	1108	292	152	38	3	12766

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 5.2 NO. OF CASES= 12766.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

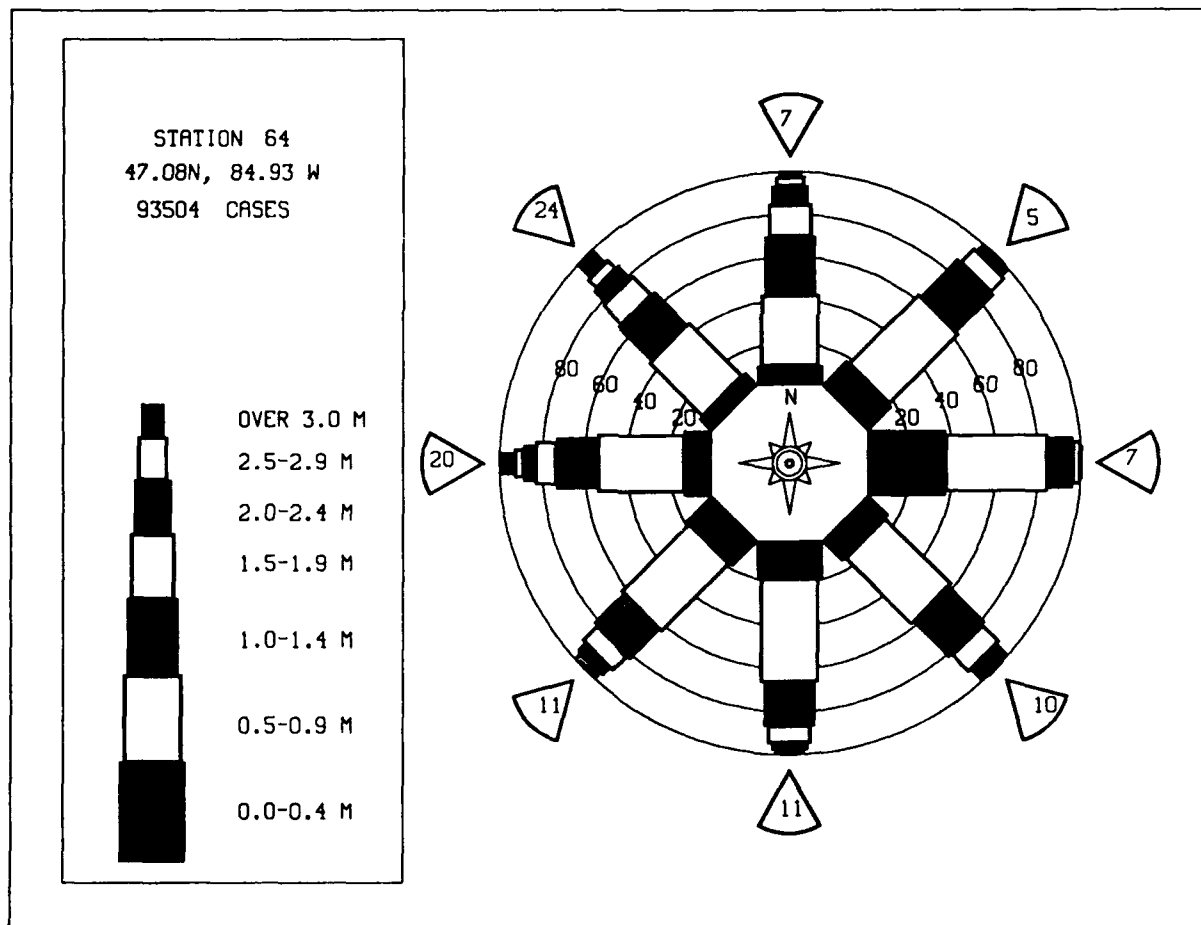
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	50	271	17	2							340
0.50-0.99		348	1018	64	8						1438
1.00-1.49			812	267	43	14					1136
1.50-1.99			140	469	108	37					754
2.00-2.49			2	281	114	62	6				465
2.50-2.99				57	186	60	19	6			328
3.00-3.49				2	32	172	11	9			226
3.50-3.99					4	72	17	3			96
4.00-4.49						11	24	8	3		46
4.50-4.99							7	13	2		22
5.00-5.49								4	1		5
5.50-5.99								2	5		7
6.00-6.49									2		2
6.50-6.99									1		1
7.00+											0
TOTAL	50	619	1989	1142	495	428	84	45	14	0	4567

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 5.0 NO. OF CASES= 4567.

STATION S64 47.08N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	152	1007	262	11	25	2	.	.	.	.	1432
0.50-0.99	.	1106	2667	351	137	17	.	.	.	.	4151
1.00-1.49	.	.	1382	239	145	50	1	.	.	.	2085
1.50-1.99	.	.	170	666	110	67	5	.	.	.	1032
2.00-2.49	.	.	.	375	229	40	13	2	.	.	557
2.50-2.99	.	.	.	31	39	127	9	6	.	.	315
3.00-3.49	1	74	16	4	.	.	181
3.50-3.99	14	33	7	.	.	95
4.00-4.49	12	16	2	.	55
4.50-4.99	1	13	2	.	30
5.00-5.49	3	4	.	16
5.50-5.99	3	.	7
6.00-6.49	1	.	3
6.50-6.99	1
7.00+	0
TOTAL	152	2113	4481	1993	686	391	90	51	13	0	

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S64 (47.08N 84.93W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	1.3	1.2	1.2	1.0	0.8	0.7	0.7	0.9	1.2	1.4	1.3	1.0
1957	1.1	1.4	1.3	1.1	1.1	1.0	1.0	0.8	1.1	1.0	1.7	1.7	1.2
1958	1.1	1.8	1.0	1.2	1.2	1.0	0.7	0.9	1.1	1.2	1.9	1.4	1.2
1959	1.1	1.5	1.3	1.3	1.2	0.9	0.8	0.7	1.1	1.3	1.8	1.5	1.3
1960	1.1	1.4	1.0	1.0	0.8	0.7	0.7	0.7	0.9	1.2	1.7	1.5	1.1
1961	1.1	1.2	1.5	1.0	1.0	0.8	0.6	0.7	1.1	1.2	1.5	1.5	1.1
1962	1.1	1.1	0.8	1.0	0.8	0.6	0.7	0.6	1.1	1.0	1.1	1.5	1.0
1963	1.1	1.4	1.2	1.2	0.9	0.7	0.8	0.7	0.8	0.9	1.5	1.4	1.1
1964	1.1	1.5	1.6	1.3	1.2	0.9	0.7	1.0	1.2	1.3	1.5	1.4	1.3
1965	1.1	1.9	1.2	1.0	1.0	0.9	0.9	0.8	1.0	1.6	1.8	1.5	1.5
1966	1.1	1.7	1.8	1.3	1.4	0.9	1.0	0.9	1.3	1.8	1.6	1.6	1.4
1967	1.1	1.8	1.5	1.3	1.2	0.8	0.8	0.8	1.0	1.4	1.6	1.7	1.5
1968	1.1	2.4	1.6	1.3	1.1	0.8	1.0	0.9	1.0	1.3	1.6	1.6	1.3
1969	1.1	1.4	1.5	1.0	0.9	0.9	0.7	0.9	1.1	1.3	1.4	1.5	1.2
1970	1.1	1.6	1.4	1.1	0.9	0.7	0.7	0.8	1.2	1.3	1.5	1.4	1.2
1971	1.1	1.8	1.6	1.2	0.9	0.7	0.8	0.8	1.0	1.1	1.4	1.6	1.2
1972	2.1	1.5	1.4	1.0	0.7	0.8	0.8	0.7	1.2	1.6	1.2	1.4	1.2
1973	1.1	1.6	1.3	1.2	0.7	0.7	0.7	0.7	1.1	1.2	1.8	1.2	1.2
1974	1.1	1.4	1.6	1.0	0.9	0.8	0.7	0.7	1.0	1.3	1.2	1.2	1.1
1975	1.1	1.5	1.2	1.3	0.6	0.8	0.8	0.8	1.0	1.3	1.4	1.3	1.1
1976	1.1	1.7	1.8	1.1	1.1	0.8	0.8	0.8	1.2	2.2	1.8	1.6	1.3
1977	1.1	1.3	1.4	1.0	0.7	0.6	0.6	0.7	1.1	1.1	1.1	1.2	1.0
1978	1.1	2.0	0.9	1.0	0.6	0.6	0.6	0.9	0.8	4.4	1.5	1.6	0.9
1979	1.1	2.3	0.9	0.7	0.6	0.6	0.6	0.7	0.9	8.8	1.5	1.7	0.9
1980	0.9	0.9	1.4	0.7	0.6	0.6	0.5	0.6	1.0	2.2	1.1	1.3	0.9
1981	1.1	1.1	1.0	0.9	0.6	0.5	0.4	0.4	0.9	1.0	1.2	1.1	1.1
1982	1.1	1.2	1.5	1.1	0.5	0.6	0.6	0.6	0.9	1.1	1.2	1.3	1.0
1983	1.1	1.0	1.1	0.8	0.7	0.6	0.5	0.6	0.9	1.1	1.4	1.1	0.9
1984	1.1	1.1	1.1	0.9	0.6	0.6	0.5	0.5	0.8	0.0	1.5	1.1	1.0
1985	1.1	1.2	1.1	0.9	0.7	0.6	0.5	0.5	0.8	1.1	1.1	1.3	1.0
1986	1.1	0.8	1.3	1.0	0.7	0.7	0.6	0.6	0.8	0.9	1.4	1.4	1.4
1987	1.5	1.2	1.2	1.1	0.8	0.7	0.7	0.9	0.8	1.2	1.5	1.4	1.1
MEAN	1.5	1.4	1.3	1.0	0.9	0.7	0.7	0.7	1.0	1.2	1.5	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S64 (47.08N 84.93W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.4	4.9	3.7	4.3	3.0	2.6	2.3	2.5	3.8	5.4	4.2	4.2	
1957	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1958	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1959	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1960	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1965	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1966	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1973	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1974	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1975	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1976	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1977	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1978	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1979	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1980	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1981	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1984	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1985	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S64

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.1
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.8
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	8.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	287.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	59120918

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	119	376	37	5	1	.	.	.	.	.	538
0.50-0.99	.	909	829	62	21	5	.	.	.	.	1826
1.00-1.49	.	.	660	39	44	28	.	.	.	.	771
1.50-1.99	.	.	257	131	28	23	3	.	.	.	442
2.00-2.49	.	.	2	120	19	27	5	2	.	.	175
2.50-2.99	.	.	.	17	5	4	7	5	.	.	38
3.00-3.49	3	5	.	.	8
3.50-3.99	1	1	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	119	1285	1785	374	118	87	19	13	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3567.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	124	366	29	5	.	.	.	.	.	.	524
0.50-0.99	.	992	628	53	28	2	.	.	.	.	1703
1.00-1.49	.	.	517	28	20	14	1	.	.	.	580
1.50-1.99	.	.	176	82	7	16	.	.	.	.	281
2.00-2.49	.	.	.	63	1	5	1	.	.	.	70
2.50-2.99	.	.	.	2	.	1	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	124	1358	1350	233	56	38	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2965.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	172	464	42	5	1	.	.	.	.	.	684
0.50-0.99	.	1565	407	38	7	3	.	.	.	.	2020
1.00-1.49	.	.	329	2	11	2	.	.	.	.	351
1.50-1.99	.	.	147	8	.	.	.	.	.	.	157
2.00-2.49	.	.	.	6	.	.	.	.	.	.	8
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	172	2029	925	62	19	14	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3019.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	262	951	54	1	.	.	.	.	.	.	1268
0.50-0.99	.	1563	229	20	4	2	.	.	.	.	1818
1.00-1.49	.	.	285	3	.	.	.	.	.	.	290
1.50-1.99	.	.	67	2	.	.	.	.	.	.	69
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	262	2514	635	28	4	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 3228.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	409	1673	72	6	2						2162
0.50-0.99		1927	100	8	4	2					2041
1.00-1.49			465	1	1						467
1.50-1.99			80								80
2.00-2.49				1							1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	409	3600	717	16	7	2	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4447.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	231	996	29	1	1						1257
0.50-0.99		2590	521	2	1						3115
1.00-1.49			870								870
1.50-1.99			326	33							359
2.00-2.49				7							7
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	231	3586	1746	44	1	1	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 5249.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	140	436	18								594
0.50-0.99		2037	534								2571
1.00-1.49			470								470
1.50-1.99			235	27							262
2.00-2.49				13							13
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	140	2473	1257	40	0	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 3660.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	154	516	8	2							680
0.50-0.99		1633	318								1951
1.00-1.49			297								297
1.50-1.99			85	7							92
2.00-2.49				6							6
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	154	2149	708	15	0	0	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2833.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	309	663	22	.	.	.	.	.	.	.	994
0.50-0.99	.	1265	196	.	.	.	.	.	.	.	1461
1.00-1.49	.	.	207	.	.	.	.	.	.	.	207
1.50-1.99	.	.	45	.	.	.	.	.	.	.	45
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	309	1928	470	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 2534.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	386	882	135	4	.	.	.	.	.	.	1407
0.50-0.99	.	1364	290	54	31	1	.	.	.	.	1740
1.00-1.49	.	.	321	44	21	2	.	.	.	.	388
1.50-1.99	.	.	94	27	12	11	.	.	.	.	144
2.00-2.49	.	.	5	8	5	.	.	.	.	.	18
2.50-2.99	.	.	.	1	6	1	.	.	.	.	8
3.00-3.49	2	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	386	2246	845	138	77	16	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3477.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	359	861	916	351	7	.	.	.	.	.	2494
0.50-0.99	.	1319	1137	666	343	18	.	.	.	.	3483
1.00-1.49	.	.	617	371	183	112	1	.	.	.	1284
1.50-1.99	.	.	127	288	67	47	10	.	.	.	539
2.00-2.49	.	.	3	143	55	10	2	.	.	.	213
2.50-2.99	.	.	.	11	83	6	.	.	.	.	100
3.00-3.49	.	.	.	1	20	28	.	.	.	.	49
3.50-3.99	2	12	.	.	.	.	14
4.00-4.49	2	1	.	.	.	3
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	359	2180	2800	1831	760	235	16	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 7664.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	294	914	820	71	1	1	.	.	.	.	2101
0.50-0.99	.	799	1927	852	120	4	.	.	.	.	3702
1.00-1.49	.	1	603	620	242	48	1	.	.	.	1515
1.50-1.99	.	.	82	456	198	77	5	.	.	.	818
2.00-2.49	.	.	.	196	129	58	7	.	.	.	390
2.50-2.99	.	.	.	17	224	43	8	1	.	.	293
3.00-3.49	.	.	.	1	38	152	3	.	.	.	194
3.50-3.99	85	19	7	.	.	111
4.00-4.49	10	20	5	1	.	36
4.50-4.99	4	.	.	.	11
5.00-5.49	2	2	.	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	294	1714	3432	2213	952	478	69	22	1	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8596.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	312	1303	583	12	1	5	2	1	.	.	2211
0.50-0.99	.	966	3188	717	27	5	2	1	.	.	4906
1.00-1.49	.	1	736	1063	195	9	2	.	.	.	2006
1.50-1.99	.	.	88	482	347	86	1	1	.	.	1005
2.00-2.49	.	.	.	216	170	174	13	.	1	.	574
2.50-2.99	.	.	.	12	245	73	37	13	.	.	380
3.00-3.49	31	218	23	17	.	.	289
3.50-3.99	106	51	9	2	.	168
4.00-4.49	16	75	25	6	.	122
4.50-4.99	2	11	44	5	1	63
5.00-5.49	2	31	11	.	44
5.50-5.99	2	19	.	21
6.00-6.49	8	.	8
6.50-6.99	1	2	3
7.00+	1	1	2
TOTAL	312	2270	4595	2502	1016	689	217	143	54	4	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 11059.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	195	1353	986	64	132	6	1	.	.	.	2598
0.50-0.99	.	1128	4680	1742	132	118	1	.	.	.	7689
1.00-1.49	.	.	1408	1327	649	118	1	.	.	.	3503
1.50-1.99	.	.	159	882	316	223	16	1	.	.	1597
2.00-2.49	.	.	.	539	216	151	42	4	.	.	952
2.50-2.99	.	.	.	27	482	56	25	8	.	.	596
3.00-3.49	113	279	21	.	.	.	421
3.50-3.99	3	227	45	11	2	.	268
4.00-4.49	67	71	38	1	.	177
4.50-4.99	4	35	42	4	.	85
5.00-5.49	11	21	5	1	38
5.50-5.99	3	14	13	.	30
6.00-6.49	1	5	1	7
6.50-6.99	10	2	12
7.00+	2	2
TOTAL	195	2481	7233	4581	1911	1131	271	148	40	6	

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 16851.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	117	574	344	32	2	.	.	.	.	.	1069
0.50-0.99	.	796	2426	622	114	10	.	.	.	.	3968
1.00-1.49	.	1	1380	741	237	104	4	.	.	.	2517
1.50-1.99	.	.	155	1151	121	110	23	1	.	.	1561
2.00-2.49	.	.	1	681	229	54	36	8	.	.	1009
2.50-2.99	.	.	.	25	618	35	19	12	.	.	709
3.00-3.49	.	.	.	1	122	294	9	8	.	.	434
3.50-3.99	155	37	16	4	.	212
4.00-4.49	40	19	23	3	.	85
4.50-4.99	1	16	17	5	.	39
5.00-5.49	2	5	9	.	16
5.50-5.99	1	2	.	3
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	117	1371	4306	3253	1493	803	165	92	24	0	

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 5.0 NO. OF CASES= 10889.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

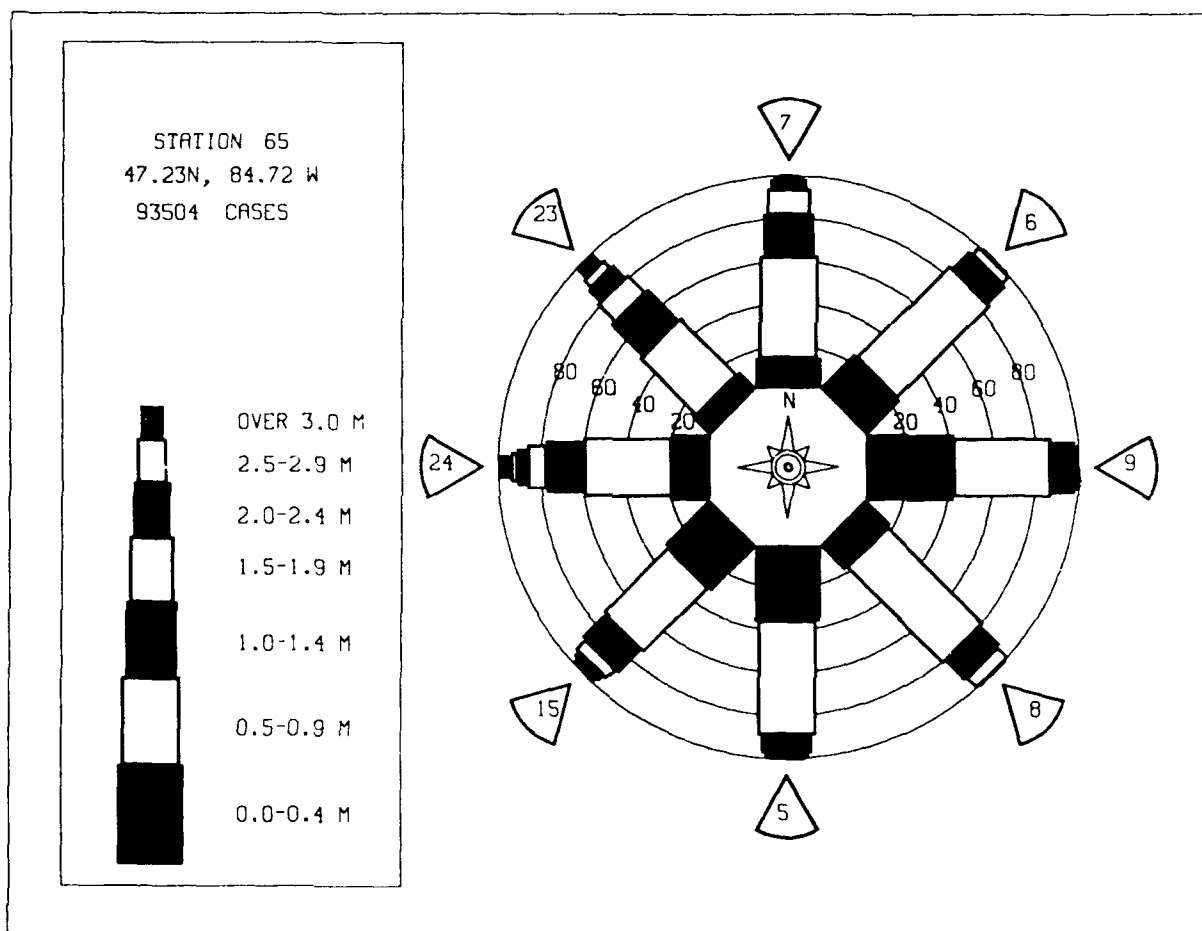
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	109	283	33	3	.	.	.	.	.	.	428
0.50-0.99	.	664	734	36	12	4	.	.	.	.	1450
1.00-1.49	.	.	550	127	19	7	.	.	.	.	703
1.50-1.99	.	.	208	267	44	16	2	.	.	.	537
2.00-2.49	.	.	4	216	49	17	9	1	.	.	296
2.50-2.99	.	.	.	21	94	17	7	3	.	.	142
3.00-3.49	28	50	5	1	.	.	84
3.50-3.99	25	3	4	.	.	32
4.00-4.49	6	2	5	.	.	13
4.50-4.99	3	3	1	.	7
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	109	947	1529	670	246	142	31	17	2	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 3466.

STATION S65 47.23N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	369	1261	413	56	1						2100
0.50-0.99		2152	1815	487	85	6					4545
1.00-1.49			972	436	167	45					1621
1.50-1.99			233	385	114	61	6				799
2.00-2.49				1	87	50	11	1			372
2.50-2.99				222	14	23	10	4			227
3.00-3.49					176	102	16	4			147
3.50-3.99					35	61	15	5			81
4.00-4.49						14	19	9	1		43
4.50-4.99							7	11	1		19
5.00-5.49							1	5	2		8
5.50-5.99								1	3		4
6.00-6.49									1		1
6.50-6.99									1		1
7.00+											0
TOTAL	369	3413	3434	1600	665	362	76	40	9	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S65 (47.23N 84.72W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.8	1.2	1.0	1.1	0.9	0.7	0.6	0.6	0.8	1.0	1.1	1.1	0.9
1957	1.4	1.3	1.2	1.1	0.9	0.9	0.9	0.8	1.0	0.9	1.6	1.5	1.1
1958	1.1	1.6	0.9	1.0	1.1	0.9	0.7	0.8	1.0	1.1	1.7	1.2	1.1
1959	1.5	1.4	1.1	1.2	1.0	0.8	0.7	0.6	1.0	1.1	1.6	1.4	1.1
1960	1.3	1.2	0.9	0.9	0.7	0.7	0.6	0.7	0.8	1.1	1.5	1.4	1.0
1961	1.0	1.0	1.3	0.9	0.9	0.9	0.7	0.6	1.0	1.0	1.3	1.3	0.9
1962	1.6	1.0	0.8	0.9	0.7	0.6	0.6	0.6	0.9	0.8	0.9	1.3	0.9
1963	1.2	1.3	1.1	1.1	0.8	0.6	0.7	0.7	0.7	0.8	1.3	1.2	1.0
1964	1.6	1.4	1.4	1.0	1.1	0.8	0.7	0.9	1.1	1.2	1.3	1.2	1.1
1965	1.7	1.7	1.0	0.9	0.9	0.8	0.9	0.7	0.9	1.4	1.6	1.3	1.1
1966	1.6	1.4	1.5	1.2	1.3	0.8	0.9	0.8	1.2	1.6	1.4	1.4	1.3
1967	1.5	1.5	1.3	1.1	1.0	0.7	0.7	0.7	0.9	1.1	1.3	1.5	1.1
1968	1.2	2.1	1.4	1.2	0.9	0.7	0.9	0.8	0.8	1.1	1.4	1.3	1.2
1969	1.5	1.2	1.4	1.1	0.8	0.8	0.9	0.9	0.9	1.1	1.2	1.2	1.1
1970	1.1	1.4	1.3	1.1	0.0	0.8	0.7	0.6	1.1	1.1	1.2	1.2	1.0
1971	1.5	1.3	1.4	1.1	0.0	0.6	0.6	0.7	0.8	1.1	1.1	1.4	0.8
1972	1.1	1.3	1.2	0.9	0.6	0.7	0.7	0.6	1.1	1.4	1.0	1.2	1.0
1973	1.1	1.1	1.1	1.1	0.9	0.6	0.7	0.6	1.1	1.0	1.6	1.1	1.0
1974	1.2	1.0	1.4	0.8	0.8	0.7	0.6	0.6	0.9	1.1	1.0	1.1	0.9
1975	1.1	1.1	1.1	1.1	0.9	0.6	0.7	0.7	0.8	1.1	1.2	1.1	0.9
1976	1.5	1.5	1.6	0.0	0.5	0.5	0.8	0.8	1.1	1.1	0.7	1.4	0.7
1977	1.1	0.0	0.8	0.0	0.5	0.5	0.5	0.6	1.0	0.8	0.9	0.9	0.7
1978	0.0	0.8	0.8	0.0	0.5	0.5	0.5	0.9	0.7	1.1	1.3	1.1	0.9
1979	0.9	0.7	0.8	0.0	0.5	0.5	0.5	0.6	0.6	0.6	1.3	1.1	0.8
1980	1.0	0.7	1.1	0.6	0.5	0.5	0.4	0.5	0.8	1.0	0.9	1.1	0.8
1981	0.8	0.8	0.8	0.0	0.5	0.5	0.3	0.3	0.7	0.8	0.8	0.9	0.7
1982	1.3	1.0	1.2	0.9	0.6	0.5	0.5	0.5	0.7	0.9	1.0	1.1	0.8
1983	1.0	0.8	0.9	0.0	0.6	0.5	0.5	0.5	0.8	0.9	1.2	1.1	0.8
1984	1.1	0.9	0.9	0.0	0.6	0.5	0.5	0.4	0.9	0.9	1.3	1.1	0.8
1985	1.1	1.0	1.0	0.7	0.5	0.5	0.5	0.4	0.8	0.8	0.9	1.1	0.8
1986	1.2	0.6	1.1	0.8	0.5	0.6	0.4	0.6	0.8	0.0	1.3	1.1	0.8
1987	1.3	1.1	1.1	0.9	0.7	0.7	0.7	0.8	0.8	1.0	1.3	1.2	1.0
MEAN	1.3	1.2	1.1	0.9	0.8	0.6	0.6	0.7	0.9	1.0	1.3	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S65 (47.23N 84.72W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.2	4.4	3.4	3.8	2.8	2.5	2.3	2.5	3.3	4.4	4.0	3.7	
1957	4.4	4.1	3.4	3.3	3.0	3.0	3.0	3.0	3.3	4.4	4.4	4.8	
1958	4.4	4.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.4	4.4	4.4	
1959	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.4	4.4	4.4	
1960	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1961	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1962	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1963	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1964	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1965	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1966	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1967	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1968	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1969	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1970	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1971	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1972	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	
1973	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	
1974	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1975	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1976	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1977	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1978	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1979	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1980	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1981	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
1982	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1983	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1984	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1985	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
1986	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1987	4.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	

32 YR. STATISTICS FOR WIS STATION S65

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	281.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	59120918

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	182	570	116	32							900
0.50-0.99		1025	216	204	64	16					1525
1.00-1.49			252	130	66	33	3				484
1.50-1.99			100	16	48	45	12	2			223
2.00-2.49			7	3	7	8					30
2.50-2.99							2				2
3.00-3.49								2			2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	182	1595	691	385	185	102	22	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 2969.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	217	574	100	20	1						912
0.50-0.99		1378	314	74	50	7					1823
1.00-1.49			355	26	31	23	1				436
1.50-1.99			176	5	3	20	1	1			206
2.00-2.49			4	12							16
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	217	1952	949	138	85	50	2	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3181.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	240	636	83	11							970
0.50-0.99		1828	460	34	13	9					2344
1.00-1.49			375	1	3	8					387
1.50-1.99			167	17							184
2.00-2.49				6							6
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	240	2464	1085	70	16	17	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3647.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	178	444	59	6							687
0.50-0.99		1326	543	4	5						1878
1.00-1.49			368	2							370
1.50-1.99			100	48							148
2.00-2.49				16							16
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	178	1770	1070	76	5	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 2903.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	178	387	39	2							606
0.50-0.99		1153	913		2	1					2069
1.00-1.49			375								375
1.50-1.99			122	124							246
2.00-2.49				49							49
2.50-2.99											0
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	178	1540	1449	175	3	1	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 3133.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	127	379	8	2							516
0.50-0.99		819	810								1629
1.00-1.49			545								548
1.50-1.99			146	268							414
2.00-2.49				166							166
2.50-2.99				14	6						20
3.00-3.49					1						1
3.50-3.99						1					1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	127	1198	1509	453	7	1	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3087.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	80	371	16	1							468
0.50-0.99		572	865								1437
1.00-1.49			702	10							712
1.50-1.99			49	269	1						319
2.00-2.49				199							199
2.50-2.99				13	8						21
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	80	943	1632	492	10	0	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 2957.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	120	475	177	13							785
0.50-0.99		745	1857	220							2826
1.00-1.49			1191	205	20						1416
1.50-1.99			114	328	11						453
2.00-2.49				137	3	1					141
2.50-2.99				8	7						15
3.00-3.49					4	1					5
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	120	1220	3339	911	49	2	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 5284.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	122	627	719	34		1					1502
0.50-0.99		614	2547	516	4						3682
1.00-1.49			821	582	17						1420
1.50-1.99			89	326	69	2					486
2.00-2.49				112	65	18					195
2.50-2.99				1	12	12					76
3.00-3.49					10	32					42
3.50-3.99						17					17
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	122	1241	4176	1571	228	82	0	0	0	0	6948.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 6948.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	183	776	490	12							1461
0.50-0.99		681	2158	296	18						3153
1.00-1.49			707	460	55	3					1225
1.50-1.99			90	340	114	14					558
2.00-2.49				151	74	24	2				251
2.50-2.99				3	96	11					110
3.00-3.49					7	35					42
3.50-3.99						10					10
4.00-4.49						2					4
4.50-4.99							2				3
5.00-5.49							1				1
5.50-5.99								1			1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	183	1457	3445	1262	364	99	8	1	0	0	6390.

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 6390.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	276	894	563	17							1750
0.50-0.99		766	2744	791	50						4351
1.00-1.49			730	740	317	13					1800
1.50-1.99			72	424	181	94					771
2.00-2.49				178	113	55	4				350
2.50-2.99				7	162	41	5				215
3.00-3.49					18	111	2				131
3.50-3.99						62	1				63
4.00-4.49						8	9				17
4.50-4.99							7				7
5.00-5.49							1	1			2
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	276	1660	4109	2157	841	384	29	1	0	0	8856.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8856.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	237	917	301	9	1	1					1466
0.50-0.99		699	2674	343	7	1					3725
1.00-1.49			775	783	127	5	2				1693
1.50-1.99			93	487	310	51					941
2.00-2.49				225	160	132	3				520
2.50-2.99				26	131	142	19				318
3.00-3.49					19	131	29				182
3.50-3.99						68	39	19			126
4.00-4.49						9	19	8			37
4.50-4.99							6	4	2		12
5.00-5.49							3	5	1		9
5.50-5.99											0
6.00-6.49									2		2
6.50-6.99											0
7.00+											0
TOTAL	237	1617	3843	1873	755	540	121	39	6	0	8461.

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8461.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	251	1217	320	9	23	2	.	.	.	.	1797
0.50-0.99	.	856	2977	436	737	17	.	.	.	.	4294
1.00-1.49	.	1	971	737	133	1	.	.	.	.	1919
1.50-1.99	.	.	161	417	258	191	1	2	.	.	930
2.00-2.49	.	.	.	275	106	139	11	1	.	.	532
2.50-2.99	.	.	.	57	125	114	26	9	.	.	331
3.00-3.49	41	70	43	25	1	.	180
3.50-3.99	6	8	23	33	4	.	75
4.00-4.49	2	1	16	5	.	28
4.50-4.99	2	1	.	6
5.00-5.49	2	.	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	251	2074	4429	1931	752	450	106	88	15	2	0
TOTAL	251	2074	4429	1931	752	450	106	88	15	2	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 9461.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	252	1163	943	51	3	1	.	.	.	.	2413
0.50-0.99	.	1019	3953	1851	173	7	.	.	.	.	7003
1.00-1.49	.	3	1132	792	671	168	3	.	.	.	2769
1.50-1.99	.	.	119	757	166	228	39	4	.	.	1313
2.00-2.49	.	.	.	476	102	86	37	4	.	.	705
2.50-2.99	.	.	.	47	306	48	22	8	2	.	433
3.00-3.49	105	141	27	10	2	.	285
3.50-3.99	4	91	51	27	1	.	174
4.00-4.49	24	33	13	2	.	72
4.50-4.99	7	10	14	3	.	34
5.00-5.49	4	8	2	.	14
5.50-5.99	3	4	.	7
6.00-6.49	1	3	1	5
6.50-6.99	0
7.00+	252	2185	6147	3974	1530	801	226	92	19	1	0
TOTAL	252	2185	6147	3974	1530	801	226	92	19	1	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 14263.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	164	619	423	45	4	.	.	.	.	.	1255
0.50-0.99	.	868	1953	632	202	20	.	.	.	.	3675
1.00-1.49	.	1	1068	437	192	126	8	.	.	.	1832
1.50-1.99	.	.	108	894	62	69	31	4	.	.	1168
2.00-2.49	.	.	2	568	104	32	21	16	.	.	743
2.50-2.99	.	.	.	23	349	27	8	8	.	.	415
3.00-3.49	105	66	13	7	3	.	194
3.50-3.99	1	49	18	17	.	.	85
4.00-4.49	11	3	21	.	.	35
4.50-4.99	1	2	1	4	.	8
5.00-5.49	2	.	2	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	164	1488	3554	2599	1019	401	106	74	9	0	0
TOTAL	164	1488	3554	2599	1019	401	106	74	9	0	0

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 8820.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

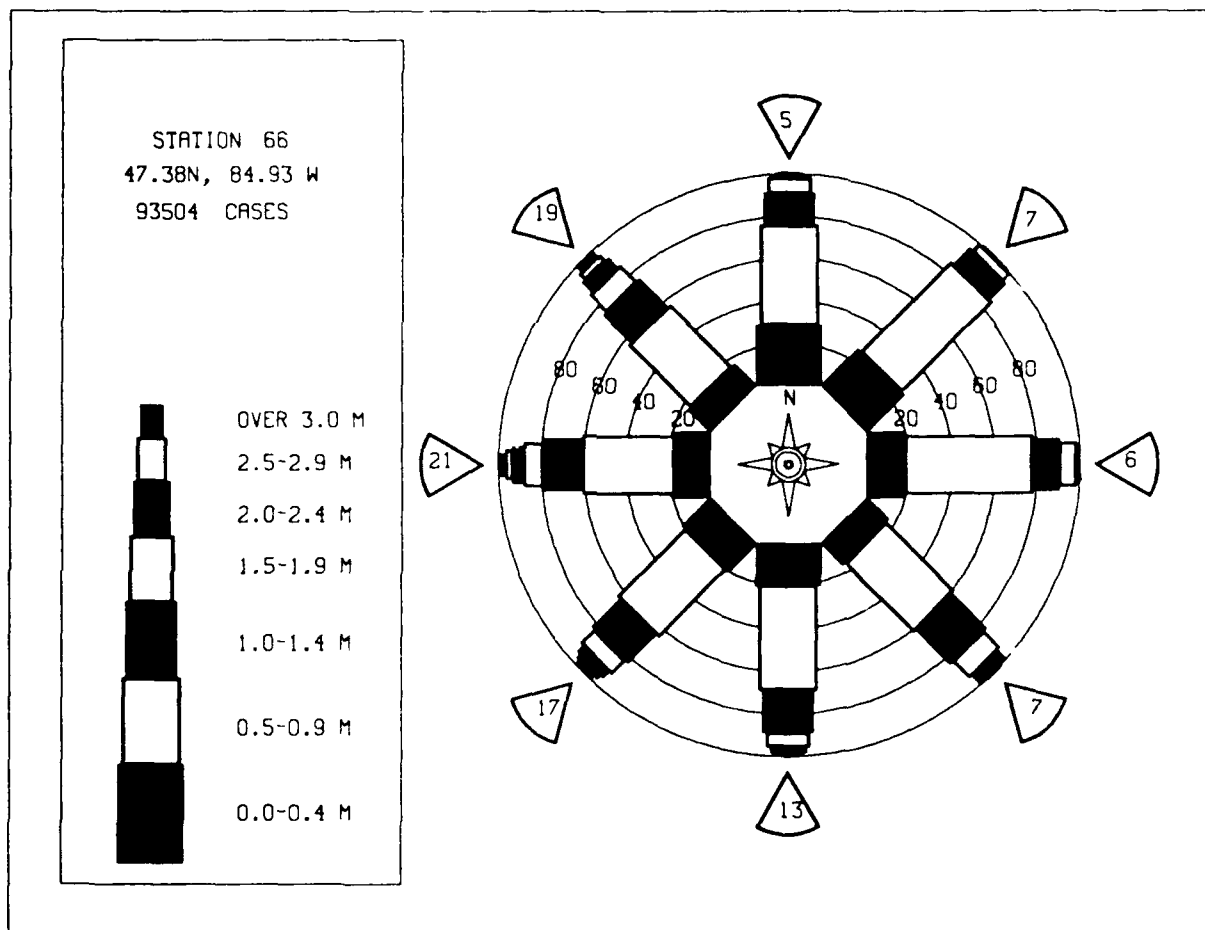
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	145	425	70	3	11	5	.	.	.	.	643
0.50-0.99	.	675	502	64	11	5	.	.	.	.	1257
1.00-1.49	.	.	392	195	22	16	.	.	.	.	625
1.50-1.99	.	.	96	226	81	13	2	.	.	.	418
2.00-2.49	.	.	4	155	35	9	6	2	.	.	211
2.50-2.99	.	.	.	10	97	3	4	1	.	.	115
3.00-3.49	28	17	5	3	.	.	53
3.50-3.99	1	12	.	4	.	.	17
4.00-4.49	4	.	3	.	.	7
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	145	1100	1064	653	275	80	17	13	0	0	0
TOTAL	145	1100	1064	653	275	80	17	13	0	0	0

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 3144.

STATION S66 47.38N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	296	1048	443	27	63	7	1	1	1	1	1814
0.50-0.99	.	1503	2549	546	511	41	1	1	1	1	4668
1.00-1.49	.	.	1076	511	171	63	8	1	1	1	1800
1.50-1.99	.	.	181	495	130	50	9	1	1	1	878
2.00-2.49	.	.	1	273	77	50	2	2	1	1	412
2.50-2.99	.	.	.	21	135	40	8	5	1	1	206
3.00-3.49	34	60	12	5	1	1	111
3.50-3.99	1	32	13	10	1	1	56
4.00-4.49	6	6	6	1	1	18
4.50-4.99	1	3	2	1	1	7
5.00-5.49	1	1	1	1	2
5.50-5.99	1	1	1	0
6.00-6.49	1	1	1	0
6.50-6.99	1	1	1	0
7.00+	1	1	1	0
TOTAL	296	2551	4250	1873	611	300	61	29	1	0	93504

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S66 (47.38N 84.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.1	1.0	1.0	0.8	0.7	0.6	0.6	0.7	1.0	1.1	1.1	0.9
1957	1.3	1.2	1.1	0.9	0.9	0.9	0.7	0.7	0.9	0.8	1.4	1.4	1.0
1958	1.0	1.4	0.8	1.0	0.9	0.8	0.6	0.7	0.9	1.0	1.6	1.1	1.0
1959	1.3	1.2	1.1	1.0	1.0	0.7	0.7	0.6	0.9	1.1	1.4	1.3	1.0
1960	1.2	1.1	0.8	0.9	0.7	0.6	0.6	0.6	0.8	1.1	1.4	1.1	0.9
1961	0.9	0.9	1.2	0.8	0.8	0.7	0.5	0.6	1.0	1.1	1.3	1.2	0.8
1962	1.4	0.9	0.7	0.8	0.7	0.5	0.5	0.5	0.9	0.8	1.0	1.1	0.8
1963	1.2	1.2	1.0	1.0	0.8	0.6	0.7	0.6	0.7	0.9	1.2	1.2	0.9
1964	1.6	1.3	1.3	1.1	1.1	1.0	0.8	0.9	1.1	1.2	1.3	1.1	1.1
1965	1.6	1.6	1.0	0.8	0.9	0.8	0.8	0.7	0.9	1.3	1.5	1.3	1.1
1966	1.4	1.4	1.5	1.1	1.1	1.1	0.8	0.8	1.1	1.5	1.3	1.3	1.2
1967	1.5	1.5	1.3	1.1	1.0	0.7	0.7	0.7	0.9	1.2	1.3	1.5	1.1
1968	1.3	1.9	1.3	1.2	0.9	0.7	0.8	0.8	0.9	1.2	1.4	1.4	1.1
1969	1.5	1.1	1.2	0.8	0.8	0.8	0.6	0.8	0.9	1.2	1.3	1.2	1.0
1970	1.1	1.4	1.2	1.0	0.7	0.6	0.7	0.7	1.1	1.3	1.3	1.2	1.0
1971	1.4	1.4	1.3	1.0	0.6	0.6	0.7	0.7	0.8	1.1	1.2	1.4	1.1
1972	1.8	1.4	1.2	0.8	0.6	0.6	0.7	0.6	1.0	1.3	1.1	1.2	1.0
1973	1.4	1.1	1.1	1.0	0.8	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.0
1974	1.2	1.1	1.4	0.8	0.7	0.7	0.6	0.6	0.9	1.1	1.1	1.1	1.1
1975	1.3	0.9	1.0	0.7	0.5	0.7	0.7	0.7	0.8	1.2	1.2	1.2	0.9
1976	1.6	1.5	1.7	1.0	0.9	0.7	0.7	0.7	1.0	1.0	1.5	1.4	1.1
1977	1.0	1.1	0.8	0.6	0.5	0.5	0.5	0.7	0.7	0.8	0.0	1.0	0.8
1978	1.0	0.9	0.9	0.7	0.5	0.5	0.5	1.1	1.0	1.3	1.4	1.6	0.9
1979	0.9	0.7	0.9	0.5	0.5	0.5	0.5	0.6	0.9	0.6	1.4	1.6	0.8
1980	1.0	0.8	1.2	0.6	0.5	0.5	0.4	0.9	1.0	0.9	1.1	1.1	1.1
1981	0.8	1.1	0.8	0.8	0.6	0.6	0.5	0.4	0.7	0.9	0.0	0.9	0.8
1982	1.3	1.1	1.3	0.9	0.5	0.5	0.5	0.6	1.1	1.0	1.1	1.2	0.8
1983	1.1	0.9	0.9	0.7	0.6	0.6	0.5	0.5	0.9	1.1	1.3	1.2	0.9
1984	1.2	1.0	1.0	0.7	0.5	0.5	0.5	0.6	1.1	1.1	1.4	1.4	1.1
1985	1.1	0.0	1.1	0.7	0.6	0.7	0.5	0.6	1.0	1.1	0.9	1.2	0.9
1986	1.2	0.0	1.2	0.9	0.6	0.5	0.5	0.9	0.9	0.9	1.4	1.4	0.9
1987	1.3	1.1	1.1	0.9	0.8	0.6	0.7	0.8	0.8	1.1	1.3	1.2	1.0
MEAN	1.2	1.1	1.1	0.9	0.7	0.6	0.6	0.7	0.9	1.1	1.3	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S66 (47.38N 84.93W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.8	3.3	3.0	3.3	2.4	2.0	1.9	2.0	2.8	3.3	3.1	3.1	
1957	3.7	3.3	3.3	3.3	2.2	2.3	3.4	2.2	3.3	3.3	3.3	3.3	
1958	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1959	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1960	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1961	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1962	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1963	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1964	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1965	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1966	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1967	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1968	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1969	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1970	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1971	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1972	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1973	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1974	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1975	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1976	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1977	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1978	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1979	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1980	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1981	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1982	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1983	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1984	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1985	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1986	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1987	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S66

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	292.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	293.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	64111806

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	129	522	53	1	1	.	.	.	.	.	706
0.50-0.99	.	397	1224	39	10	.	.	.	.	.	1670
1.00-1.49	.	.	937	78	27	5	.	.	.	.	1047
1.50-1.99	.	.	51	457	7	25	.	.	.	.	540
2.00-2.49	.	.	.	258	22	12	5	.	.	.	297
2.50-2.99	.	.	.	9	140	3	3	2	.	.	157
3.00-3.49	29	4	1	.	.	.	34
3.50-3.99	3	.	1	.	.	4
4.00-4.49	2	.	.	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	129	919	2265	842	236	54	9	4	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 4182.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	142	494	59	7	12	3	.	.	.	.	702
0.50-0.99	.	760	1164	25	17	8	.	.	.	.	1964
1.00-1.49	.	.	518	191	17	8	.	.	.	.	734
1.50-1.99	.	.	144	224	5	8	.	.	.	.	381
2.00-2.49	.	.	13	116	23	1	.	.	.	.	153
2.50-2.99	.	.	.	5	51	.	.	.	.	.	56
3.00-3.49	9	6	1	.	.	.	16
3.50-3.99	1	2	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	142	1254	1898	568	118	28	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 3760.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	190	611	79	2	7	.	.	.	.	.	882
0.50-0.99	.	1409	825	43	7	.	.	.	.	.	2284
1.00-1.49	.	.	311	152	4	1	.	.	.	.	468
1.50-1.99	.	.	151	48	4	1	.	.	.	.	204
2.00-2.49	.	.	1	10	4	1	.	.	.	.	16
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	190	2020	1367	255	19	3	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 3611.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	181	552	89	3	4	.	.	.	.	.	825
0.50-0.99	.	961	262	39	4	.	.	.	.	.	1266
1.00-1.49	.	.	168	32	.	.	.	.	.	.	200
1.50-1.99	.	.	41	4	1	.	.	.	.	.	46
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	181	1513	561	78	5	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2192.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	214	623	119	2							958
0.50-0.99		674	137	50	1						862
1.00-1.49			120	43							163
1.50-1.99			51	6	11						68
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	214	1297	427	101	12	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 1925.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	167	448	60	1							676
0.50-0.99		414	235	14							663
1.00-1.49			78	28							106
1.50-1.99			24	57	4						85
2.00-2.49			2	27	8						37
2.50-2.99					8	1					9
3.00-3.49						1					1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	167	862	399	127	20	2	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 1483.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	126	351	122	3							602
0.50-0.99		507	829	39							1398
1.00-1.49			305	228	11						544
1.50-1.99			27	182	23						236
2.00-2.49				72	42	4					118
2.50-2.99					70	1					71
3.00-3.49					2	3					5
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	126	858	1283	544	151	12	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 2793.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	127	604	504	42	3						1280
0.50-0.99		534	1720	491	125						2876
1.00-1.49			659	383	201	6					1235
1.50-1.99			35	322	124	12					508
2.00-2.49				150	58	16	1				215
2.50-2.99				2	102	7					104
3.00-3.49					6						12
3.50-3.99					1						1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	127	1138	2918	1380	619	48	1	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 5838.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	124	682	579	23	4	1	.	.	.	.	1412
0.50-0.99	.	487	1933	442	81	5	.	.	.	.	2944
1.00-1.49	.	.	553	505	182	5	.	.	.	.	1245
1.50-1.99	.	.	42	321	120	4	.	.	.	.	487
2.00-2.49	.	.	.	130	71	13	.	.	.	.	214
2.50-2.99	.	.	.	4	69	9	.	.	.	.	82
3.00-3.49	4	51	.	.	.	.	55
3.50-3.99	5	.	.	.	.	5
4.00-4.49	1	.	.	.	1
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	124	1169	3107	1425	531	88	2	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6041.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	147	776	478	16	.	.	.	.	.	.	1417
0.50-0.99	.	586	2092	494	49	.	.	.	.	.	3221
1.00-1.49	.	.	587	513	146	4	.	.	.	.	1251
1.50-1.99	.	.	63	366	152	38	.	.	.	.	619
2.00-2.49	.	.	.	157	115	32	.	.	.	.	304
2.50-2.99	.	.	.	10	116	21	4	.	.	.	151
3.00-3.49	19	51	1	.	.	.	71
3.50-3.99	21	1	.	.	.	23
4.00-4.49	1	6	.	.	.	7
4.50-4.99	4	.	.	.	4
5.00-5.49	3	.	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	147	1362	3220	1556	597	169	16	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6622.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	210	919	533	12	.	.	.	.	.	.	1674
0.50-0.99	.	660	2912	869	23	.	.	.	.	.	4464
1.00-1.49	.	1	660	871	348	6	.	.	.	.	1886
1.50-1.99	.	.	64	321	317	80	.	.	.	.	782
2.00-2.49	.	.	1	149	106	121	2	.	.	.	379
2.50-2.99	.	.	.	3	144	49	11	.	.	.	207
3.00-3.49	11	102	9	2	.	.	124
3.50-3.99	62	17	3	.	.	82
4.00-4.49	7	48	1	.	.	56
4.50-4.99	11	14	.	.	25
5.00-5.49	1	7	.	.	8
5.50-5.99	3	2	.	5
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	210	1580	4170	2225	949	427	99	30	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 9081.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	188	913	285	1	.	.	.	.	.	.	1387
0.50-0.99	.	675	2496	310	9	1	.	.	.	.	3491
1.00-1.49	.	.	657	804	117	16	1	.	.	.	1595
1.50-1.99	.	.	64	345	252	51	4	.	.	.	716
2.00-2.49	.	.	.	142	132	132	2	.	.	.	417
2.50-2.99	.	.	.	2	95	103	13	1	.	.	214
3.00-3.49	9	93	23	6	2	.	133
3.50-3.99	41	40	14	.	.	95
4.00-4.49	1	28	21	.	.	40
4.50-4.99	4	12	1	1	18
5.00-5.49	4	3	.	7
5.50-5.99	4	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	1	1	1
TOTAL	188	1588	3502	1603	624	438	115	48	12	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 7606.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	195	1078	797	28	1	.	.	.	.	.	2099
0.50-0.99	.	675	4007	2281	67	4	.	.	.	.	7037
1.00-1.49	.	2	660	1567	1078	130	1	.	.	.	3438
1.50-1.99	.	.	69	402	542	588	42	.	.	.	1643
2.00-2.49	.	.	.	124	166	383	173	.	.	.	897
2.50-2.99	.	.	.	11	151	167	133	51	21	1	569
3.00-3.49	24	135	57	73	36	1	326
3.50-3.99	1	54	36	47	33	7	176
4.00-4.49	5	17	27	20	1	76
4.50-4.99	5	25	22	3	55
5.00-5.49	5	14	3	24
5.50-5.99	1	5	2	8
6.00-6.49	1	2	6
6.50-6.99	1	2
7.00+	1
TOTAL	195	1755	5533	4413	2030	1466	464	315	154	31	15319.

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 5.3 NO. OF CASES= 15319.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	181	1054	613	45	.	.	.	.	.	.	1893
0.50-0.99	.	659	3452	1402	101	1	.	.	.	.	5615
1.00-1.49	.	.	989	1081	749	60	1	.	.	.	2880
1.50-1.99	.	.	108	478	409	291	17	1	.	.	1304
2.00-2.49	.	.	2	260	137	260	57	.	.	.	723
2.50-2.99	.	.	.	26	180	109	49	37	2	.	403
3.00-3.49	41	156	41	35	11	.	284
3.50-3.99	81	60	22	8	1	172
4.00-4.49	11	33	22	18	1	85
4.50-4.99	10	22	8	3	43
5.00-5.49	8	7	3	18
5.50-5.99	1	7	1	9
6.00-6.49	1	1	2
6.50-6.99	1	1
7.00+	2	2
TOTAL	181	1713	5164	3292	1617	969	268	155	62	13	12586.

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 5.1 NO. OF CASES= 12586.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	142	662	226	10	.	.	.	.	.	.	1040
0.50-0.99	.	515	1722	312	58	1	.	.	.	.	2608
1.00-1.49	.	.	999	188	157	45	2	.	.	.	1391
1.50-1.99	.	.	122	423	95	99	6	.	.	.	745
2.00-2.49	.	.	.	270	74	75	19	.	.	.	438
2.50-2.99	.	.	.	20	99	70	17	7	.	.	213
3.00-3.49	26	68	26	7	.	.	127
3.50-3.99	1	10	34	10	1	.	56
4.00-4.49	2	11	21	.	.	34
4.50-4.99	1	.	3	1	.	5
5.00-5.49	1	1	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	142	1177	3069	1223	510	371	115	49	4	0	6246.

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 6246.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	171	476	26	2	1	.	.	.	.	.	676
0.50-0.99	.	383	1228	23	6	1	.	.	.	.	1641
1.00-1.49	.	.	951	58	24	10	.	.	.	.	1043
1.50-1.99	.	.	74	462	27	18	.	.	.	.	581
2.00-2.49	.	.	.	271	26	17	8	.	.	.	322
2.50-2.99	.	.	.	28	115	12	10	1	.	.	166
3.00-3.49	21	16	7	2	.	.	46
3.50-3.99	2	.	8	4	.	.	14
4.00-4.49	1	3	.	.	4
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	171	859	2279	844	222	74	34	10	0	0	4217.

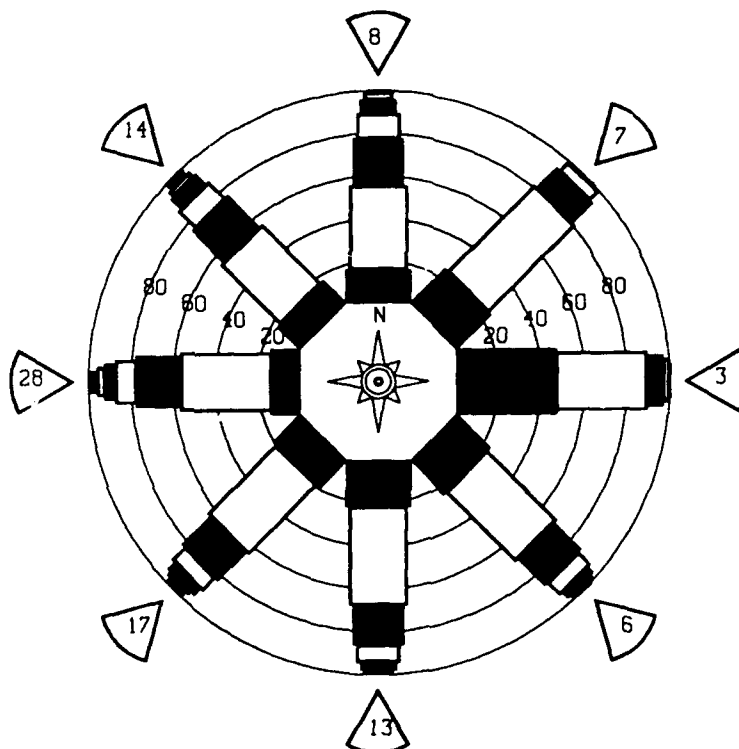
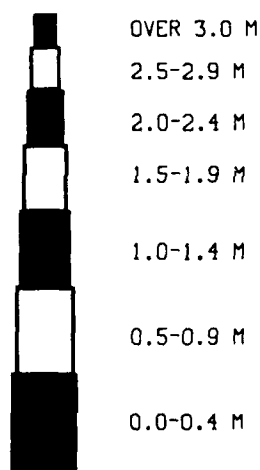
MEAN HS(M) = 1.1 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4217.

STATION S67 47.53N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	264	1077	463	20	1						1825
0.50-0.99		1030	2624	690	56	1					4401
1.00-1.49			916	671	306	30					1923
1.50-1.99			113	443	210	122	7				895
2.00-2.49			2	214	100	106	26	5			453
2.50-2.99				12	134	54	24	13	2		239
3.00-3.49					20	69	17	12	5		123
3.50-3.99						28	19	10	4		61
4.00-4.49						3	14	8	3		28
4.50-4.99							3	7	3		13
5.00-5.49								2	2		4
5.50-5.99									2		2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	264	2107	4118	2050	827	413	110	57	21	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.

STATION 67
47.53N, 85.15 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S67 (47.53N 85.15W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1957	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1958	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1959	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1960	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1961	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1962	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1963	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1964	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1965	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1966	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1967	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1968	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1969	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1970	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1971	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1972	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1973	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1974	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1975	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1976	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1977	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1978	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1979	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1980	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1981	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1982	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1983	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1984	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1985	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1986	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
1987	0.6	1.1	0.9	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.0	1.0	0.8
MEAN	1.3	1.2	1.2	0.9	0.7	0.6	0.6	0.7	0.9	1.1	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S67 (47.53N 85.15W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	3.5	2.6	3.1	2.0	1.5	1.5	1.5	2.6	4.0	2.8	3.4	
1957	3.8	3.3	3.2	2.5	2.4	3.2	3.0	1.9	2.9	2.5	3.3	4.7	
1958	2.9	3.3	2.2	4.5	3.1	2.0	1.8	1.9	2.6	3.4	5.9	3.7	
1959	3.4	4.9	2.9	2.5	4.1	2.4	1.7	1.5	3.0	3.5	4.7	6.2	
1960	3.5	3.0	2.4	3.1	1.6	1.4	1.8	2.0	2.7	3.7	4.6	4.3	
1961	3.5	3.4	4.2	2.2	2.6	1.9	1.8	2.2	2.8	3.1	4.3	4.9	
1962	3.8	2.5	3.1	2.8	1.8	1.5	1.7	1.5	2.6	4.5	3.4	4.9	
1963	3.5	4.2	3.1	4.2	2.5	2.1	2.3	1.4	1.7	2.6	4.5	3.9	
1964	5.2	5.2	4.2	5.3	3.6	3.2	1.7	3.3	4.5	3.8	5.8	3.2	
1965	4.4	4.8	3.4	3.0	2.1	2.2	2.2	2.1	3.3	4.8	5.5	4.2	
1966	6.0	4.3	4.6	3.2	2.6	2.8	2.1	2.6	4.0	6.2	3.7	4.4	
1967	4.3	4.0	3.3	3.8	3.0	1.8	2.2	1.9	3.1	4.1	3.9	5.1	
1968	3.6	5.7	4.3	3.6	2.5	1.7	3.2	2.6	2.5	3.8	4.6	4.4	
1969	4.0	4.2	3.4	2.5	1.8	2.3	2.0	2.5	2.7	4.1	3.9	4.0	
1970	3.8	4.4	3.6	4.1	2.7	1.9	2.1	2.0	3.1	4.4	4.3	5.2	
1971	4.1	4.9	4.8	3.1	1.8	1.3	2.0	1.7	2.9	3.8	5.0	5.1	
1972	5.8	4.5	3.0	3.1	1.6	1.6	1.4	1.5	3.8	5.7	4.0	4.5	
1973	3.6	2.8	4.3	3.3	2.3	1.7	1.9	1.9	3.5	4.1	3.9	3.3	
1974	4.1	4.6	3.4	2.4	1.8	1.5	1.9	1.9	2.5	3.2	3.6	3.6	
1975	5.7	4.0	2.5	1.9	1.3	2.2	2.1	2.8	2.3	4.7	4.2	4.5	
1976	7.8	4.5	4.4	3.2	3.7	2.0	2.0	2.9	3.5	4.2	4.8	5.5	
1977	4.7	4.8	4.8	1.8	1.7	1.3	2.3	2.2	5.4	4.5	7.4	3.2	
1978	3.6	2.3	3.8	2.4	1.6	1.7	2.1	3.3	2.8	3.9	5.0	4.4	
1979	3.4	3.1	3.0	2.4	2.1	1.8	1.6	1.9	3.2	2.2	4.6	4.4	
1980	7.2	4.2	5.1	1.8	2.7	1.7	1.2	1.7	3.9	4.6	4.7	3.3	
1981	2.9	3.5	3.1	2.6	1.6	2.8	2.0	1.4	4.2	3.3	4.6	4.8	
1982	5.4	4.1	6.5	5.8	1.4	2.0	1.6	1.8	3.1	4.5	4.5	4.4	
1983	4.3	5.3	3.7	2.4	1.6	2.0	2.2	2.0	3.2	3.7	5.8	3.3	
1984	5.2	3.0	4.2	3.6	2.5	3.0	1.7	2.5	2.8	4.7	5.4	5.6	
1985	5.3	3.9	4.7	3.1	1.8	3.4	1.8	2.2	4.9	3.5	3.1	5.0	
1986	5.4	2.2	4.5	2.9	2.6	2.9	1.1	2.3	3.1	3.5	5.8	4.4	
1987	3.9	4.1	3.9	4.0	2.9	2.1	1.9	3.1	2.6	3.5	4.6	4.2	

32 YR. STATISTICS FOR WIS STATION S67

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	282.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	76011500

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	223	602	31	1	5	2	.	.	.	.	857
0.50-0.99	.	564	1189	9	5	7	.	.	.	.	1769
1.00-1.49	.	.	1118	6	10	7	.	.	.	.	1141
1.50-1.99	.	.	108	333	5	9	.	.	.	.	455
2.00-2.49	.	.	.	263	1	3	3	1	.	.	271
2.50-2.99	.	.	.	20	33	.	1	.	.	.	54
3.00-3.49	3	.	1	1	.	.	5
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	223	1166	2446	632	57	23	5	2	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4266.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	198	612	53	4	7	1	.	.	.	.	867
0.50-0.99	.	751	1236	10	7	9	.	.	.	.	2005
1.00-1.49	.	.	778	108	3	1	.	.	.	.	898
1.50-1.99	.	.	67	367	12	1	.	.	.	.	437
2.00-2.49	.	.	4	179	33	.	.	.	.	.	195
2.50-2.99	.	.	.	3	5	.	.	.	.	.	36
3.00-3.49	5
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	198	1363	2138	671	62	13	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4166.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	262	697	50	2	1	.	.	.	.	.	1012
0.50-0.99	.	1118	1128	13	3	1	.	.	.	.	2263
1.00-1.49	.	.	391	149	1	.	.	.	.	.	541
1.50-1.99	.	.	111	143	2	1	.	.	.	.	257
2.00-2.49	.	.	4	16	7	.	.	.	.	.	27
2.50-2.99	.	.	.	3	1	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	262	1815	1684	326	15	2	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 3843.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	232	576	51	4	.	.	.	.	.	.	863
0.50-0.99	.	911	324	7	.	.	.	.	.	.	1242
1.00-1.49	.	.	160	32	.	.	.	.	.	.	192
1.50-1.99	.	.	42	10	.	.	.	.	.	.	52
2.00-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	232	1487	577	55	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2202.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	250	655	52	1	.	.	.	.	.	.	958
0.50-0.99	.	601	60	8	.	.	.	.	.	.	669
1.00-1.49	.	.	139	3	.	.	.	.	.	.	142
1.50-1.99	.	.	25	.	.	.	.	.	.	.	25
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	250	1256	276	12	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 1681.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	235	396	14	.	.	.	.	.	.	.	645
0.50-0.99	.	361	35	.	.	.	.	.	.	.	396
1.00-1.49	.	.	49	.	.	.	.	.	.	.	49
1.50-1.99	.	.	17	1	.	.	.	.	.	.	18
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	757	116	1	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 1040.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	144	345	67	7	.	.	.	.	.	.	563
0.50-0.99	.	648	80	33	5	.	.	.	.	.	766
1.00-1.49	.	.	73	9	5	1	.	.	.	.	88
1.50-1.99	.	.	26	3	5	2	.	.	.	.	36
2.00-2.49	2	2	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	144	993	246	52	17	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 1368.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	193	640	491	72	5	.	.	.	.	.	1401
0.50-0.99	.	1034	824	546	131	7	.	.	.	.	2542
1.00-1.49	.	.	145	364	214	20	.	.	.	.	743
1.50-1.99	.	.	10	77	163	31	.	.	.	.	281
2.00-2.49	.	.	.	7	98	13	1	.	.	.	119
2.50-2.99	4	6	.	.	.	.	10
3.00-3.49	0
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	193	1674	1470	1066	615	78	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 4777.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	167	733	845	136	17						1898
0.50-0.99		712	1805	755	253	5	1				3531
1.00-1.49			503	662	368	25					1558
1.50-1.99			43	315	181	21					560
2.00-2.49				111	118	25					254
2.50-2.99				3	73	10					86
3.00-3.49					7	38					45
3.50-3.99						9					9
4.00-4.49											0
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	167	1445	3196	1982	1017	133	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 7440.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	174	857	709	27							1767
0.50-0.99		664	2413	730	69						3876
1.00-1.49			671	655	267	14					1607
1.50-1.99			56	394	218	50	2				720
2.00-2.49				180	116	68	1				365
2.50-2.99				2	152	22	7				183
3.00-3.49					14	100	3				117
3.50-3.99						52	2	3			57
4.00-4.49						5	6				11
4.50-4.99							9	2			11
5.00-5.49							1	4			5
5.50-5.99									2		2
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	174	1521	3849	1988	836	311	31	9	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 8171.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	214	1041	564	8							1827
0.50-0.99		743	3274	881	19						4917
1.00-1.49			745	975	377	10					2107
1.50-1.99			66	356	372	74					868
2.00-2.49			3	151	119	156	2				431
2.50-2.99				4	136	69	11				220
3.00-3.49					6	104	19	4			133
3.50-3.99						47	19	9			75
4.00-4.49						8	39	12	1		60
4.50-4.99							11	16			27
5.00-5.49								25	3		28
5.50-5.99								4	1		5
6.00-6.49									2		2
6.50-6.99											0
7.00+											0
TOTAL	214	1784	4652	2375	1029	468	101	70	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 10023.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	196	977	311	3	2						1489
0.50-0.99		728	2773	386	21						3908
1.00-1.49			728	910	151	24		1			1814
1.50-1.99			58	357	262	66	2	1			746
2.00-2.49				131	156	146	10	1			444
2.50-2.99				4	101	114	18	5			242
3.00-3.49					14	81	29	12	1		137
3.50-3.99						28	39	16	2		85
4.00-4.49						1	18	14	1		34
4.50-4.99							3	11	3		17
5.00-5.49								4	1		5
5.50-5.99								1	3		4
6.00-6.49									1		1
6.50-6.99										1	1
7.00+											1
TOTAL	196	1705	3870	1791	707	460	119	66	13	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8365.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	214	1166	1066	57							2503
0.50-0.99		669	4324	2945	99	3					8040
1.00-1.49		1	740	1719	1328	167	2				3957
1.50-1.99			68	388	563	736	51	2			1808
2.00-2.49				140	122	462	243	71			1038
2.50-2.99				10	130	166	137	112	17	1	573
3.00-3.49					14	119	54	90	40	2	319
3.50-3.99						37	37	29	42	13	158
4.00-4.49						6	24	24	29	19	82
4.50-4.99							4	19	21	13	87
5.00-5.49								4	12	7	23
5.50-5.99								1	4	7	9
6.00-6.49									4	4	4
6.50-6.99									2	1	3
7.00+										1	1
TOTAL	214	1836	6198	5259	2256	1696	552	352	167	55	
MEAN HS (M) = 1.1	LARGEST HS (M) = 7.8		MEAN TP (SEC) = 5.3		NO. OF CASES = 17407.						

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) -292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	183	949	636	56							1824
0.50-0.99		725	2850	1203	120	2					4900
1.00-1.49			1173	688	576	127	1				2565
1.50-1.99				337	298	242	16	2			1054
2.00-2.49				159	188	141	191	45	7		572
2.50-2.99					21	79	147	57	26		331
3.00-3.49					1	18	100	68	33	1	226
3.50-3.99							24	25	25		81
4.00-4.49								22	13	6	45
4.50-4.99							4				8
5.00-5.49								1			2
5.50-5.99								2		1	4
6.00-6.49									2		0
6.50-6.99										1	1
7.00+										1	1
TOTAL	183	1674	4818	2494	1232	837	235	109	29	3	
MEAN HS(M) = 1.0	LARGEST HS(M) = 7.3		MEAN TP(SEC) = 4.9		NO. OF CASES = 10879.						

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	141	529	133	14	1						818
0.50-0.99		533	1163	176	60	10	1				1943
1.00-1.49			842	45	74	63	5				1029
1.50-1.99			155	220	47	60	11				493
2.00-2.49			2	117	19	42	14	1			185
2.50-2.99				18	8	36	29	3			94
3.00-3.49				3	3	3	20	11			40
3.50-3.99					1	1	2	2			6
4.00-4.49									1		2
4.50-4.99						1					0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	141	1062	2295	593	213	216	82	17	1	0	
MEAN HS(M) = 1.0	LARGEST HS(M)= 4.0		MEAN TP(SEC)= 4.3		NO. OF CASES= 4337.						

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) -337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

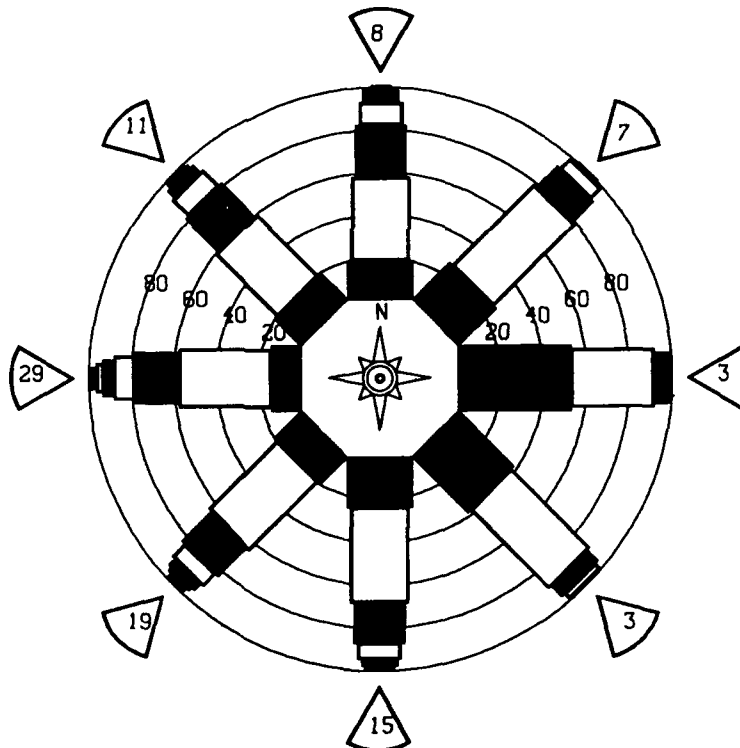
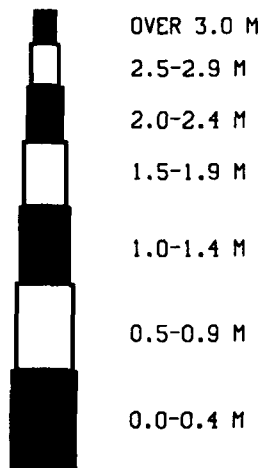
HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	194	498	18								710
0.50-0.99	.	448	95	4	3	1	.	.	.	.	1451
1.00-1.49	.	.	928	5	1	5	.	.	.	.	939
1.50-1.99	.	.	149	259	6	9	.	.	.	.	423
2.00-2.49	.	.	.	191	4	7	.	.	.	.	202
2.50-2.99	.	.	.	31	9	2	4	.	.	.	47
3.00-3.49	.	.	.	1	1	.	.	2	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	194	946	2090	491	20	21	11	3	0	0	
MEAN HS (M) = 0.9	LARGEST HS (M) = 3.2		MEAN TP (SEC) = 4.0		NO. OF CASES = 3539.						

STATION S68 47.67N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	322	1128	509	39	2	3	.	.	.	.	2000
0.50-0.99	.	1121	2448	771	80	47	.	.	.	.	4423
1.00-1.49	.	.	918	633	338	130	8	.	.	.	1936
1.50-1.99	.	.	116	356	212	111	33	8	.	.	822
2.00-2.49	.	.	1	168	91	57	26	14	1	.	412
2.50-2.99	.	.	.	12	76	54	19	15	4	.	186
3.00-3.49	8	20	12	8	5	1	100
3.50-3.99	2	11	6	3	i	46
4.00-4.49	3	5	2	.	22
4.50-4.99	4	1	.	11
5.00-5.49	1	.	5
5.50-5.99	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	322	2249	3992	1979	807	424	112	60	17	2	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.

STATION 68
47.67N, 85.15 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S68 (47.67N 85.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.5	1.0	0.8	0.8	0.6	0.5	0.5	0.5	0.6	0.9	0.9	0.9	0.7
1957	0.2	1.1	0.9	0.8	0.6	0.7	0.6	0.6	0.8	0.7	1.1	1.2	0.9
1958	0.8	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.8	0.8	1.1	1.0	0.8
1959	1.0	0.9	0.9	0.8	0.8	0.5	0.5	0.5	0.8	0.8	1.3	1.0	0.8
1960	1.0	0.9	0.9	0.8	0.8	0.5	0.5	0.5	0.7	0.8	1.1	1.1	0.8
1961	0.8	0.8	0.9	0.6	0.7	0.6	0.4	0.5	0.8	0.8	1.1	1.0	0.8
1962	1.3	0.7	0.6	0.7	0.5	0.4	0.4	0.5	0.7	0.7	1.1	1.1	0.7
1963	1.2	1.2	1.0	0.9	0.7	0.6	0.6	0.6	0.7	0.9	1.1	1.2	0.9
1964	1.4	1.3	1.2	1.0	0.9	0.9	0.7	0.6	0.9	1.0	1.2	1.1	1.0
1965	1.6	1.6	0.9	0.8	0.8	0.8	0.8	0.6	0.9	1.2	1.5	1.3	1.1
1966	1.4	1.5	1.4	1.0	1.0	0.8	0.8	0.7	1.1	1.6	1.4	1.5	1.2
1967	1.4	1.5	1.4	1.1	0.9	0.7	0.7	0.7	1.0	1.3	1.4	1.7	1.1
1968	1.3	1.8	1.4	1.1	0.8	0.7	0.8	0.8	0.9	1.3	1.3	1.4	1.1
1969	1.5	1.0	1.2	0.8	0.8	0.7	0.6	0.8	0.9	1.2	1.3	1.1	1.0
1970	1.1	1.4	1.1	1.0	0.8	0.6	0.6	1.1	1.3	1.2	1.2	1.1	1.0
1971	1.4	1.3	1.2	0.9	0.7	0.5	0.7	0.6	0.8	1.1	1.2	1.2	1.0
1972	1.7	1.2	1.1	0.8	0.5	0.6	0.6	0.5	0.9	1.2	1.0	1.1	0.9
1973	1.3	1.1	1.0	0.9	0.6	0.5	0.6	0.6	0.9	1.1	1.3	1.0	0.9
1974	1.1	0.9	1.2	0.8	0.6	0.7	0.6	0.7	0.9	1.1	1.1	1.0	0.9
1975	1.2	0.9	0.9	0.6	0.5	0.6	0.6	0.7	0.8	1.3	1.2	1.1	0.9
1976	1.6	1.4	1.5	0.9	0.8	0.7	0.6	0.7	0.9	0.9	1.4	1.3	1.1
1977	1.3	1.2	1.0	0.6	0.6	0.6	0.6	0.8	0.8	0.9	1.1	1.0	0.9
1978	1.2	1.2	1.1	0.7	0.6	0.6	0.6	1.2	0.9	1.3	1.4	1.6	1.0
1979	1.1	0.8	1.0	0.6	0.6	0.6	0.6	0.6	1.0	0.7	1.5	1.7	0.9
1980	1.2	0.9	1.2	0.7	0.7	0.6	0.5	0.7	1.0	1.1	1.0	1.3	0.9
1981	1.0	1.2	0.9	0.9	0.7	0.7	0.6	0.5	0.8	1.1	1.2	1.1	0.9
1982	1.6	1.3	1.5	1.0	0.6	0.6	0.7	0.6	0.9	1.2	1.3	1.4	1.1
1983	1.3	1.2	1.2	0.8	0.7	0.7	0.6	0.7	1.0	1.1	1.5	1.4	1.0
1984	1.5	1.2	1.2	0.9	0.8	0.6	0.6	0.6	0.9	1.2	1.7	1.6	1.1
1985	1.3	1.2	1.4	0.9	0.7	0.9	0.7	0.7	1.2	1.4	1.1	1.5	1.1
1986	1.6	0.8	1.5	1.1	0.8	0.8	0.5	0.8	1.1	1.2	1.6	1.7	1.1
1987	1.2	1.0	1.0	0.8	0.7	0.6	0.6	0.7	0.7	1.1	1.2	1.3	0.9
MEAN	1.2	1.1	1.1	0.8	0.7	0.6	0.6	0.7	0.9	1.1	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S68 (47.67N 85.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.2	3.3	2.7	2.7	2.1	1.4	1.4	1.2	2.1	3.9	2.2	3.3	
1957	3.5	3.3	2.9	2.3	2.5	3.3	2.5	1.5	2.3	1.9	2.9	3.9	
1958	2.7	2.6	1.8	4.5	2.6	1.9	1.8	1.7	2.4	3.1	6.7	3.6	
1959	3.6	4.9	2.3	2.9	3.9	1.8	1.6	1.5	2.6	2.9	4.5	5.6	
1960	3.0	2.4	2.3	3.0	1.4	1.3	1.7	2.1	2.1	3.0	4.3	3.8	
1961	2.7	3.1	4.1	2.5	2.4	1.7	1.6	1.7	2.5	2.8	4.1	4.5	
1962	3.6	2.2	2.9	2.5	1.5	1.2	1.4	1.4	2.2	4.2	3.4	4.3	
1963	3.2	3.3	2.7	3.3	2.2	1.9	1.8	1.2	1.7	2.6	3.7	3.8	
1964	5.2	5.0	3.3	5.2	4.2	3.0	1.5	3.0	4.3	3.9	5.8	3.0	
1965	4.1	5.1	2.9	3.0	2.3	2.3	2.0	1.9	3.1	4.4	4.8	4.3	
1966	6.4	4.0	4.8	3.2	2.8	2.9	2.1	2.2	3.4	5.9	3.3	4.4	
1967	4.2	3.7	3.4	3.9	3.0	1.9	1.9	1.7	2.7	4.4	3.6	3.3	
1968	3.4	5.2	4.6	3.6	2.7	1.7	3.2	2.6	2.5	3.7	4.3	3.8	
1969	3.9	3.6	3.5	2.6	1.9	2.2	2.2	2.3	2.8	4.3	3.8	3.3	
1970	3.3	4.0	3.3	4.2	2.6	1.8	1.8	1.6	3.0	4.9	3.9	5.0	
1971	4.1	4.6	4.5	2.7	2.2	1.3	1.7	1.6	3.0	4.0	5.0	5.2	
1972	4.8	3.8	2.6	2.9	1.4	1.4	1.3	1.5	3.8	4.6	3.9	4.4	
1973	3.3	2.6	4.1	2.9	1.8	1.2	1.9	1.1	2.9	3.6	3.2	4.0	
1974	3.9	4.1	3.2	2.4	1.9	1.5	1.8	1.9	2.2	3.5	3.5	4.0	
1975	5.3	3.3	2.1	1.6	1.4	2.2	1.7	2.7	2.4	4.8	3.6	3.7	
1976	7.8	4.4	4.1	2.9	3.0	1.9	1.7	2.5	3.3	3.9	4.5	5.4	
1977	4.4	4.3	4.1	1.8	1.7	1.5	2.2	2.3	5.3	5.0	3.3	3.5	
1978	4.0	2.4	3.9	2.4	1.7	1.7	2.3	3.2	2.6	4.0	4.9	4.8	
1979	3.6	3.1	2.6	2.0	2.3	1.8	1.4	1.9	2.8	2.3	4.5	4.3	
1980	6.9	4.5	4.0	1.9	2.8	1.6	1.2	1.8	3.9	4.2	4.1	4.1	
1981	2.8	3.6	3.2	2.6	1.8	2.9	1.9	1.4	4.3	3.7	5.2	5.1	
1982	4.9	4.1	6.2	5.3	1.5	1.9	1.6	1.7	3.2	5.2	4.6	4.6	
1983	4.6	6.2	3.3	2.4	1.8	1.9	2.1	2.4	3.3	3.7	5.5	4.1	
1984	5.4	3.3	4.3	3.6	2.2	3.0	1.7	2.6	3.0	5.1	5.2	6.1	
1985	4.8	4.1	4.5	3.0	1.9	3.2	1.9	2.5	5.6	3.7	4.4	5.6	
1986	6.2	2.1	4.5	2.8	2.2	3.1	1.3	2.7	3.0	3.8	6.4	5.2	
1987	3.4	3.9	3.4	3.4	2.9	1.8	1.7	2.7	2.0	3.2	4.1	4.3	

32 YR. STATISTICS FOR WIS STATION S68

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	280.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	76011500

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	356	467	17	1	.	.	.	.	.	.	841
0.50-0.99		1470	1056	.	.	.	.	.	.	.	2526
1.00-1.49	.	.	735	.	1	.	.	1	.	.	738
1.50-1.99	.	.	243	178	.	2	.	.	.	.	423
2.00-2.49	.	.	.	60	.	.	2	.	.	.	62
2.50-2.99	.	.	.	5	.	.	.	1	.	.	6
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00-5.49	.	.	.	.	.	.	.	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	356	1937	2051	244	1	3	2	2	0	0	0
MEAN HS (M) = 0.8	LARGEST HS (M) = 2.7		MEAN TP (SEC) = 3.6		NO. OF CASES = 4303.						

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	397	625	20	2							1044
0.50-0.99		973	1371		1	1					2346
1.00-1.49			1253			1					1254
1.50-1.99			166	397		1	1				565
2.00-2.49				223				1			224
2.50-2.99				18	14						32
3.00-3.49					10						10
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	397	1598	2810	640	25	3	1	1	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M) = 3.4		MEAN TP(SEC) = 3.8		NO. OF CASES = 5126.						

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	388	741	22	1		1	.	.	.	.	1153
0.50-0.99	.	596	1369		1		.	.	.	.	1966
1.00-1.49	.	.	1082		.	.	.	.	.	.	1082
1.50-1.99	.	.	56	290	.	.	.	.	.	.	346
2.00-2.49	.	.		127	.	.	.	.	.	.	127
2.50-2.99	.	.		5	8	.	.	.	.	.	13
3.00-3.49	.	.			5	.	.	.	.	.	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	388	1337	2529	423	14	1	0	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M) = 3.3		MEAN TP(SEC) = 3.8		NO. OF CASES = 4393.						

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	317	589	22	1	.	.	.	.	.	.	929
0.50-0.99	.	574	466	.	.	1	.	.	.	.	1041
1.00-1.49	.	.	315	1	.	1	.	.	.	.	317
1.50-1.99	.	.	23	39	.	1	.	.	.	.	63
2.00-2.49	.	.	.	14	.	.	.	.	.	.	14
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	317	1163	826	55	0	3	0	0	0	0	
MEAN HS (M) = 0.6	LARGEST HS (M) = 2.3		MEAN TP (SEC) = 3.3		NO. OF CASES = 2215.						

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	313	694	18								1025
0.50-0.99	.	612	60	2	1	.	.	.	.	.	675
1.00-1.49	.	.	139	1	.	.	.	.	.	.	140
1.50-1.99	.	.	18	.	.	.	.	.	.	.	19
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	313	1306	236	3	1	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1741.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	241	395	12	.	.	.	.	.	.	.	648
0.50-0.99	.	387	35	.	.	.	.	.	.	.	422
1.00-1.49	.	.	53	.	.	.	.	.	.	.	53
1.50-1.99	.	.	18	.	.	.	.	.	.	.	18
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	241	782	118	1	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 1071.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	207	300	25	2	.	.	.	.	.	.	534
0.50-0.99	.	534	58	5	7	.	.	.	.	.	604
1.00-1.49	.	.	65	.	.	1	.	.	.	.	66
1.50-1.99	.	.	22	1	2	3	.	.	.	.	28
2.00-2.49	1	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	207	834	170	8	10	4	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 1158.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	269	671	286	102	8	.	.	.	.	.	1336
0.50-0.99	.	1250	315	295	122	5	.	.	.	.	1987
1.00-1.49	.	.	103	60	71	18	.	.	.	.	235
1.50-1.99	.	.	29	14	3	18	1	.	.	.	133
2.00-2.49	.	.	2	3	18	13	.	.	.	.	34
2.50-2.99	2	3	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	269	1921	735	474	273	58	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3500.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	258	798	982	216	33						2287
0.50-0.99		888	1674	1017	399	20					3998
1.00-1.49			489	612	511	52					1664
1.50-1.99			71	252	228	37	1				589
2.00-2.49				88	102	27					217
2.50-2.99				6	77	17					100
3.00-3.49					7	32	1				40
3.50-3.99						14	2				16
4.00-4.49							1				1
4.50-4.99											0
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	258	1686	3216	2191	1357	199	5	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 8348.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	235	991	845	39	105						2110
0.50-0.99		890	2890	1063	383						4948
1.00-1.49			736	733	383	25					1877
1.50-1.99			79	398	293	71	1				842
2.00-2.49				183	131	87	3				404
2.50-2.99				5	178	40	7	1			231
3.00-3.49					19	101	4				124
3.50-3.99						66	3				75
4.00-4.49						7	16				23
4.50-4.99							9	3			12
5.00-5.49								6			6
5.50-5.99								2			2
6.00-6.49									1		0
6.50-6.99											1
7.00+											0
TOTAL	235	1881	4550	2421	1109	397	46	15	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 9980.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	274	1150	547	7	1						1979
0.50-0.99		957	3805	791	22	1					5576
1.00-1.49			1033	987	373	13					2406
1.50-1.99			88	438	358	97					981
2.00-2.49				171	180	142	1				494
2.50-2.99				10	111	103	14	1			239
3.00-3.49					16	111	28	3			158
3.50-3.99						49	28	7			84
4.00-4.49						3	45	16			64
4.50-4.99						1	7	21	1		30
5.00-5.49								14	1		15
5.50-5.99								2			3
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	274	2107	5473	2404	1061	520	123	64	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 11264.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	269	1241	456	16	5						1987
0.50-0.99		868	3763	502	21						5154
1.00-1.49		1	886	1266	208	22	1				2384
1.50-1.99			67	447	418	88	3				1023
2.00-2.49			1	137	158	185	10				491
2.50-2.99				5	128	116	32	9			280
3.00-3.49					11	91	26	12			140
3.50-3.99						42	31	11			84
4.00-4.49						3	18	16	2		39
4.50-4.99							6	14	5		25
5.00-5.49								5	3		8
5.50-5.99									3	1	4
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	269	2110	5173	2373	949	547	127	67	14	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 10894.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	286	1274	1008	38	6	21	2	.	.	.	2612
0.50-0.99	.	1094	4378	1936	162	173	9	.	.	.	7593
1.00-1.49	.	.	867	1505	896	173	9	1	.	.	3451
1.50-1.99	.	.	84	398	473	348	23	2	.	.	1328
2.00-2.49	.	.	1	151	143	291	64	12	2	.	664
2.50-2.99	.	.	.	10	137	116	71	31	1	.	366
3.00-3.49	9	117	31	23	2	.	182
3.50-3.99	35	31	16	9	1	92
4.00-4.49	4	23	7	3	2	51
4.50-4.99	3	19	2	.	12
5.00-5.49	4	1	.	5
5.50-5.99	4	.	4
6.00-6.49	2	1	3
6.50-6.99	1	1	2
7.00+	1	1
TOTAL	286	2368	6338	4038	1826	1105	257	115	27	6	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 15325.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	245	973	479	97	4	72	2	.	.	.	1798
0.50-0.99	.	2077	1194	854	317	72	2	.	.	.	4516
1.00-1.49	.	.	440	271	275	214	25	.	.	.	1225
1.50-1.99	.	.	131	103	173	149	37	3	.	.	596
2.00-2.49	.	.	6	29	55	116	59	16	.	.	281
2.50-2.99	.	.	.	2	14	29	35	14	1	.	95
3.00-3.49	3	18	6	7	2	.	36
3.50-3.99	4	2	1	1	.	8
4.00-4.49	1	4	1	.	.	6
4.50-4.99	2	2	2	.	6
5.00-5.49	1	1	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	245	3050	2250	1356	841	603	172	45	8	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 8034.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	203	574	36	7	4	1	1	.	.	.	825
0.50-0.99	.	1470	334	29	49	19	1	.	.	.	1901
1.00-1.49	.	.	374	2	14	27	4	.	.	.	421
1.50-1.99	.	.	117	3	11	20	7	1	.	.	159
2.00-2.49	.	.	2	11	2	8	13	6	1	.	43
2.50-2.99	.	.	.	1	.	.	.	1	.	.	2
3.00-3.49	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	203	2044	863	54	80	74	25	8	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 3146.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	269	394	10	.	1	.	.	.	.	.	673
0.50-0.99	.	1159	587	.	.	.	.	.	.	.	1747
1.00-1.49	.	.	491	.	.	.	.	.	.	.	491
1.50-1.99	.	.	172	82	.	1	1	.	.	.	256
2.00-2.49	.	.	.	42	.	1	.	.	.	.	43
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	269	1553	1260	124	1	2	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 3006.

STATION S69 47.80N 85.15W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

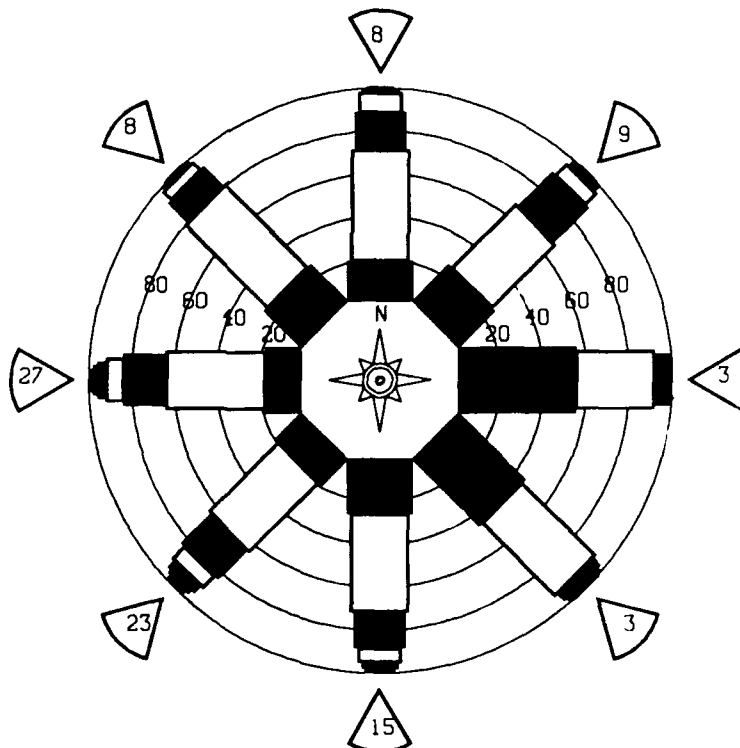
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	453	1188	479	53	6	14	.	.	.	.	2179
0.50-0.99	.	1580	2336	649	121	55	4	.	.	.	4700
1.00-1.49	.	.	906	544	271	87	7	.	.	.	1780
1.50-1.99	.	.	139	304	203	84	15	3	.	.	737
2.00-2.49	.	.	1	124	79	47	16	5	.	.	309
2.50-2.99	.	.	.	7	67	42	9	4	.	.	137
3.00-3.49	8	21	10	3	.	.	68
3.50-3.99	1	10	5	1	.	35
4.00-4.49	2	4	.	.	16
4.50-4.99	3	.	.	7
5.00-5.49	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	453	2768	3861	1681	755	351	73	27	2	0	93504

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.

STATION 69
 47.80N, 85.15 W
 93504 CASES



OVER 3.0 M
 2.5-2.9 M
 2.0-2.4 M
 1.5-1.9 M
 1.0-1.4 M
 0.5-0.9 M
 0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S69 (47.80N 85.15W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.9	0.7	0.7	0.5	0.5	0.4	0.4	0.5	0.8	0.8	0.7	0.6
1957	1.0	0.9	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.7	1.0	1.0	0.8
1958	0.7	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
1959	0.8	0.9	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
1960	0.8	0.9	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
1961	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
1962	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.2	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1968	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1982	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1983	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
1984	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1985	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
1986	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1987	1.1	0.9	0.9	0.7	0.6	0.5	0.6	0.6	0.6	1.0	1.1	1.1	1.2
MEAN	1.1	1.0	1.0	0.8	0.7	0.6	0.6	0.6	0.8	1.0	1.1	1.1	1.1

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S69 (47.80N 85.15W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	2.4	2.4	2.0	1.7	1.6	1.2	1.0	1.6	2.8	1.9	2.2	
1957	3.4	3.2	2.4	2.1	2.5	3.2	1.9	1.5	2.4	2.5	2.8	2.9	
1958	2.4	2.4	1.4	4.4	2.1	2.0	1.4	1.3	2.0	2.1	7.5	2.6	
1959	3.8	4.8	2.3	2.0	3.7	1.7	1.6	1.5	2.4	2.1	3.0	3.7	
1960	2.6	1.9	2.0	2.4	1.6	1.3	1.7	2.0	1.8	2.6	3.5	3.7	
1961	2.4	2.2	3.1	2.0	1.7	1.8	1.2	1.9	2.0	2.5	4.0	3.3	
1962	3.1	1.9	1.9	1.9	1.5	1.3	1.3	1.4	2.0	4.0	2.8	4.3	
1963	2.8	3.1	2.3	2.5	2.2	2.1	2.0	1.3	1.9	2.8	2.9	3.7	
1964	5.0	4.2	3.5	4.9	3.6	2.9	1.4	2.8	3.9	3.7	5.7	3.2	
1965	4.0	3.4	2.4	3.1	2.3	2.5	2.0	1.8	3.2	4.2	4.0	3.9	
1966	3.2	3.6	4.4	2.7	2.2	2.3	2.3	2.0	2.9	5.4	3.2	3.9	
1967	4.2	3.9	3.5	3.2	3.1	1.8	1.7	1.4	2.8	4.1	3.0	4.5	
1968	3.8	4.7	3.5	3.3	2.0	1.7	2.4	2.1	2.7	3.6	3.5	3.5	
1969	3.4	3.0	3.7	2.6	1.6	2.1	1.8	2.3	3.0	4.1	3.6	3.0	
1970	2.8	4.0	2.9	3.2	2.0	1.8	1.5	1.5	3.4	4.5	4.0	4.3	
1971	4.1	3.3	3.7	2.2	2.6	1.4	2.1	1.6	2.9	4.2	4.5	5.7	
1972	4.1	3.8	2.3	2.7	1.2	1.5	1.4	1.6	3.5	4.0	3.7	3.4	
1973	3.2	2.8	4.1	2.9	1.8	1.2	1.9	1.3	2.9	3.6	3.2	4.0	
1974	3.6	3.6	3.3	2.5	2.0	1.6	1.5	1.9	2.2	3.5	3.3	3.6	
1975	5.0	2.6	1.9	1.5	1.5	1.9	1.7	2.7	2.4	5.1	3.7	3.0	
1976	6.9	4.4	4.2	2.8	2.4	2.1	1.4	2.1	3.6	4.1	4.5	5.5	
1977	3.8	3.3	2.7	1.9	1.7	1.8	2.1	2.2	5.3	4.9	7.4	3.5	
1978	3.7	2.5	4.3	2.1	1.9	1.5	2.2	3.1	2.5	4.1	5.2	4.6	
1979	3.4	3.1	2.6	1.6	2.3	2.0	1.3	2.0	2.9	2.2	4.5	4.1	
1980	6.0	4.7	3.1	2.2	2.7	1.5	1.2	1.8	4.3	4.1	3.2	4.0	
1981	2.7	3.4	3.1	2.9	2.1	2.9	1.8	1.5	4.2	3.6	5.0	5.2	
1982	5.1	4.5	5.9	4.2	1.7	1.6	1.5	1.5	3.1	4.7	4.8	4.6	
1983	4.2	5.7	3.3	2.4	2.2	1.8	2.2	2.3	3.3	3.7	5.0	4.0	
1984	5.1	3.3	4.2	3.7	1.7	2.7	1.5	2.4	3.0	5.0	4.5	5.9	
1985	4.1	3.8	4.5	2.7	1.7	3.0	1.9	2.3	5.4	4.0	3.4	4.8	
1986	6.6	2.1	4.6	2.9	2.2	3.1	1.3	2.7	3.1	4.2	5.9	4.9	
1987	3.2	4.0	3.0	2.7	2.9	1.5	1.7	2.0	1.9	3.1	3.7	4.5	

32 YR. STATISTICS FOR WIS STATION S69

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	272.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	744	1612	10	1	.	.	.	.	.	.	2367
0.50-0.99	.	2191	133	.	.	.	.	.	.	.	2324
1.00-1.49	.	.	541	.	.	.	.	.	.	.	541
1.50-1.99	.	.	48	.	.	.	.	.	.	.	48
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	744	3803	732	1	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 4940.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	685	1229	10	1	.	.	.	.	.	.	1925
0.50-0.99	.	2033	403	.	.	.	.	.	.	.	2436
1.00-1.49	.	.	542	.	.	.	.	.	.	.	542
1.50-1.99	.	.	172	24	.	.	.	.	.	.	196
2.00-2.49	.	.	.	12	.	.	.	.	.	.	12
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	685	3262	1127	41	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 4787.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	627	1048	13	.	.	.	.	.	.	.	1688
0.50-0.99	.	2615	685	.	.	.	.	.	.	.	3300
1.00-1.49	.	.	527	.	.	.	.	.	.	.	527
1.50-1.99	.	.	186	20	.	1	.	.	.	.	207
2.00-2.49	.	.	.	10	.	.	.	.	.	.	10
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	627	3663	1441	30	0	1	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 5392.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	441	543	10	.	.	.	.	.	.	.	994
0.50-0.99	.	1506	467	.	.	.	.	.	.	.	1973
1.00-1.49	.	.	296	.	.	.	.	.	.	.	296
1.50-1.99	.	.	75	25	.	1	.	.	.	.	101
2.00-2.49	.	.	.	4	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	441	2049	848	29	0	1	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 3154.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	356	314	7	.	.	.	.	.	.	.	677
0.50-0.99	.	948	537	.	.	.	.	.	.	.	1485
1.00-1.49	.	.	251	.	.	.	.	.	.	.	251
1.50-1.99	.	.	71	50	.	2	.	.	.	.	123
2.00-2.49	.	.	.	10	.	.	.	.	.	.	10
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	356	1262	866	60	0	2	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2385.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	294	242	6	.	.	.	.	.	.	.	542
0.50-0.99	.	638	214	.	.	.	.	.	.	.	852
1.00-1.49	.	.	113	.	.	.	.	.	.	.	113
1.50-1.99	.	.	41	21	.	.	.	.	.	.	62
2.00-2.49	.	.	.	6	.	.	.	.	.	.	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	294	880	374	27	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 1477.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	272	392	8	.	.	.	.	.	.	.	672
0.50-0.99	.	766	139	.	1	1	.	.	.	.	905
1.00-1.49	.	.	83	.	2	5	.	.	.	.	85
1.50-1.99	.	.	33	.	1	1	.	.	.	.	40
2.00-2.49	.	.	.	2	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	272	1158	263	2	4	7	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 1599.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	413	715	164	45	4	.	.	.	.	.	1341
0.50-0.99	.	1429	289	144	89	.	.	.	.	.	1956
1.00-1.49	.	.	131	32	37	.	.	.	.	.	229
1.50-1.99	.	.	37	16	70	20	.	.	.	.	143
2.00-2.49	.	.	2	2	11	8	.	.	.	.	23
2.50-2.99	1	1	.	.	.	.	2
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	413	2144	623	239	232	46	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3468.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	448	1072	1267	326	45						3158
0.50-0.99		1222	2145	1316	512	31					5226
1.00-1.49			680	703	498	69					1950
1.50-1.99			82	320	256	40	1				699
2.00-2.49				132	101	39					272
2.50-2.99				4	99	26					129
3.00-3.49					5	60		1			66
3.50-3.99						22					26
4.00-4.49						1	6				7
4.50-4.99											0
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	448	2294	4174	2801	1516	288	11	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 10798.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	541	1350	1606	94	6						3597
0.50-0.99		1243	3711	1657	240	6					6857
1.00-1.49			950	837	561	66					2414
1.50-1.99			80	491	308	137	2				1018
2.00-2.49				201	94	100	9				405
2.50-2.99				7	209	51	9	1			277
3.00-3.49					18	132	16				153
3.50-3.99						80	16	2			98
4.00-4.49						11	28	12			51
4.50-4.99							10	8			19
5.00-5.49							3	5			7
5.50-5.99								2			0
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	541	2593	6347	3287	1436	583	80	31	8	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 13955.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	798	1602	1522	163	25	7					4117
0.50-0.99		1864	3091	1483	367	110	13	3			6931
1.00-1.49			970	624	475	268	25	6			2368
1.50-1.99			93	445	182	189	36	2	1		948
2.00-2.49				151	87	87	35	9	3		372
2.50-2.99				6	121	63	19	9	3		221
3.00-3.49					11	96	13	7			127
3.50-3.99						45	32	12	3	1	93
4.00-4.49						6	22	28	4		60
4.50-4.99						1	17	1	1		24
5.00-5.49							5	8	4		12
5.50-5.99								1	6	1	8
6.00-6.49									2	1	3
6.50-6.99											0
7.00+									1		1
TOTAL	798	3466	5676	2872	1268	872	200	102	28	3	

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 14318.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-11.9 LONGER	
0.00-0.49	1017	1920	819	494	316	233	20	6			4825
0.50-0.99		2772	370	366	317	475	172	86	21	1	4580
1.00-1.49			322	90	102	179	51	59	22	4	829
1.50-1.99			60	45	37	75	27	25	9	5	283
2.00-2.49				18	14	18	9	14	10	2	88
2.50-2.99				1	6	6	2	3	6	1	25
3.00-3.49						8	4	4	2		18
3.50-3.99						1	3	2			6
4.00-4.49							1	1	3		1
4.50-4.99											4
5.00-5.49									3	1	1
5.50-5.99									1		0
6.00-6.49											0
6.50-6.99											0
7.00+										1	1
TOTAL	1017	4692	1574	1014	792	995	288	202	77	15	

MEAN HS(M) = 0.6 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 9998.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	864	1525	20	9	27	34	2				2481
0.50-0.99		1959	208	1	3	26	35	28	2		2262
1.00-1.49			285		1	2	3	2	6		301
1.50-1.99			99			11	4	3	4		121
2.00-2.49			2	2			1	1	3	1	10
2.50-2.99									1	2	3
3.00-3.49										1	1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	864	3484	614	12	31	73	45	34	16	6	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 4852.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	497	999	5		1						1502
0.50-0.99		1848	309			1		1			2159
1.00-1.49			295						2		297
1.50-1.99			142	12		1		1	2		158
2.00-2.49			1	18							19
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	497	2847	752	31	1	2	0	2	4	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 3871.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	355	747	5	2							1109
0.50-0.99		2163	542								2705
1.00-1.49			405								405
1.50-1.99			193	29							222
2.00-2.49				14							14
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	355	2910	1145	45	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4170.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

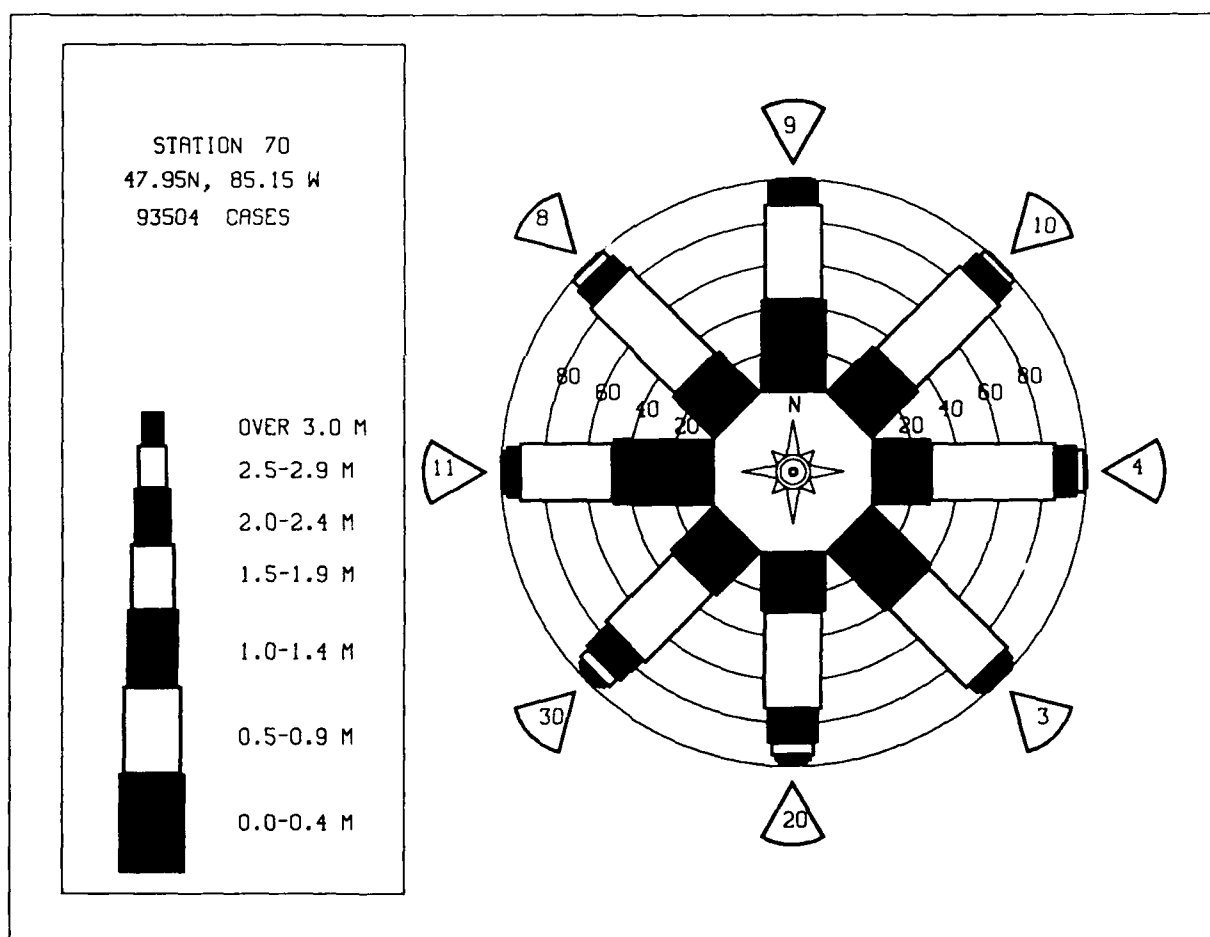
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	532	1064	9								1605
0.50-0.99		2039	313								2352
1.00-1.49			503								503
1.50-1.99			157	13							170
2.00-2.49			1	4							5
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	532	3103	983	19	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 4340.

STATION S70 47.95N 85.15W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	889	1638	548	113	42	27	2	1	2	.	3259
0.50-0.99	.	2724	1356	496	153	65	22	11	3	.	4829
1.00-1.49	.	.	693	228	169	59	8	6	1	.	1166
1.50-1.99	.	.	157	151	85	48	7	3	1	.	452
2.00-2.49	.	.	.	59	31	25	5	2	1	.	123
2.50-2.99	.	.	.	2	43	14	3	1	1	.	64
3.00-3.49	3	30	2	1	.	.	36
3.50-3.99	15	5	1	.	.	21
4.00-4.49	1	5	4	.	.	10
4.50-4.99	1	2	.	.	3
5.00-5.49	1	.	.	1
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	889	4362	2754	1049	526	284	60	32	9	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S70 (47.95N 85.15W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.4	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.4	0.7	0.6	0.5	0.5
1957	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.6	0.5	0.7	0.7	0.6
1958	0.5	0.6	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.9	0.6	0.5
1959	0.6	0.6	0.6	0.5	0.6	0.4	0.4	0.3	0.5	0.5	0.7	0.6	0.5
1960	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.7	0.5
1961	0.5	0.5	0.6	0.4	0.5	0.4	0.3	0.4	0.6	0.6	0.8	0.6	0.6
1962	0.7	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.5	0.5	0.8	0.8	0.5
1963	0.7	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	0.8	0.9	0.7
1964	1.0	1.0	0.9	0.9	0.7	0.6	0.5	0.7	0.8	0.9	0.8	0.9	0.8
1965	1.0	1.0	1.1	0.7	0.7	0.7	0.6	0.5	0.7	0.9	1.0	0.9	0.8
1966	0.8	1.0	1.1	0.7	0.7	0.6	0.6	0.5	0.8	1.1	1.0	1.0	0.8
1967	1.0	1.0	1.1	0.7	0.7	0.6	0.5	0.6	0.8	1.0	0.9	1.1	0.8
1968	1.0	1.0	1.0	0.9	0.7	0.6	0.7	0.6	0.7	1.0	1.0	1.0	0.8
1969	1.1	0.7	0.8	0.7	0.6	0.6	0.5	0.7	0.7	0.9	0.9	0.8	0.8
1970	0.8	1.0	0.8	0.8	0.7	0.6	0.5	0.5	0.8	1.1	0.9	0.8	0.8
1971	0.8	0.9	0.9	0.7	0.6	0.5	0.5	0.5	0.7	0.9	0.9	0.9	0.7
1972	1.0	0.8	0.8	0.6	0.4	0.5	0.4	0.5	0.7	0.9	0.8	0.8	0.7
1973	0.9	0.9	0.8	0.7	0.6	0.4	0.5	0.5	0.7	0.8	0.9	0.8	0.7
1974	0.8	0.7	0.9	0.6	0.5	0.5	0.5	0.6	0.7	0.9	0.9	0.8	0.7
1975	0.9	0.6	0.7	0.4	0.4	0.5	0.5	0.6	0.7	1.1	1.0	0.9	0.7
1976	1.1	1.0	1.1	0.7	0.6	0.5	0.4	0.5	0.7	0.7	0.9	0.8	0.7
1977	0.7	0.8	0.7	0.5	0.5	0.4	0.5	0.7	0.7	0.7	0.9	0.7	0.6
1978	0.8	0.7	0.8	0.6	0.5	0.5	0.5	1.0	0.8	1.0	1.2	1.2	0.8
1979	0.8	0.7	0.8	0.5	0.5	0.6	0.5	0.9	0.6	1.2	1.3	1.3	0.7
1980	0.8	0.7	1.0	0.6	0.5	0.5	0.4	0.6	0.8	0.8	0.8	0.8	0.7
1981	0.8	1.0	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.9	0.9	0.9	0.7
1982	1.0	1.0	1.2	0.8	0.6	0.5	0.5	0.5	0.8	1.0	1.1	1.0	0.8
1983	1.0	1.0	1.0	0.7	0.6	0.6	0.6	0.6	0.8	0.9	1.3	1.0	0.8
1984	1.3	1.1	0.9	0.7	0.6	0.5	0.5	0.5	0.8	1.1	1.3	1.2	0.9
1985	0.9	0.9	1.1	0.7	0.6	0.7	0.6	0.7	1.2	1.2	0.8	1.0	0.9
1986	1.2	0.6	1.2	0.9	0.7	0.7	0.5	0.7	1.0	1.1	1.4	1.4	0.9
1987	0.9	0.7	0.8	0.6	0.5	0.4	0.5	0.5	0.5	0.7	0.9	0.9	0.7
MEAN	0.8	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.7	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S70 (47.95N 85.15W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.8	1.7	2.0	1.2	1.3	0.9	0.7	0.9	1.2	2.8	1.4	1.6	
1957	2.7	2.8	2.0	1.7	1.4	3.3	1.3	1.3	1.9	1.6	2.1	1.9	
1958	2.1	1.6	0.8	1.8	1.7	1.6	0.8	1.3	1.7	1.7	4.2	1.7	
1959	2.0	3.3	2.2	1.6	3.8	1.5	1.2	0.9	2.0	1.5	1.8	1.7	
1960	1.9	1.4	1.7	1.4	1.2	1.2	1.2	2.2	1.7	1.9	2.6	3.3	
1961	1.5	1.4	2.0	1.2	1.6	1.8	0.7	2.0	1.8	2.1	4.1	1.1	
1962	1.9	1.5	1.4	1.2	1.3	1.4	0.9	1.4	1.6	3.0	2.2	3.5	
1963	2.0	3.0	2.5	2.1	2.0	2.4	1.9	1.1	1.8	3.0	2.2	2.8	
1964	5.7	4.4	3.7	4.5	3.7	2.0	1.4	2.7	3.7	3.8	2.2	2.2	
1965	4.2	3.3	1.9	2.8	1.7	1.8	1.7	1.5	2.9	3.0	3.7	3.3	
1966	2.8	3.0	3.7	2.2	2.2	1.7	2.1	1.8	2.3	5.7	3.2	4.4	
1967	3.1	4.1	3.6	3.3	2.9	1.9	1.3	1.7	2.5	4.3	3.3	3.3	
1968	3.4	2.1	3.6	3.1	2.0	2.0	2.2	1.4	2.6	2.9	3.0	3.5	
1969	3.4	2.7	3.4	1.8	1.8	2.1	1.2	2.2	3.1	3.8	3.8	2.2	
1970	2.7	3.5	2.7	3.0	2.3	1.8	1.5	1.4	3.3	4.5	4.2	1.1	
1971	2.3	3.1	2.9	2.0	2.8	1.3	1.7	1.7	3.1	3.9	4.1	3.8	
1972	3.9	4.1	2.1	1.7	1.0	1.4	1.3	1.6	3.0	3.1	3.0	2.3	
1973	2.8	2.7	3.7	2.7	1.5	1.0	1.7	1.4	1.9	3.5	3.2	4.3	
1974	2.9	2.2	2.1	1.5	2.0	1.7	1.2	1.8	2.6	3.3	3.1	2.2	
1975	4.5	1.7	1.6	1.2	1.7	1.6	1.7	2.9	2.5	5.1	4.1	2.9	
1976	4.0	3.4	3.3	1.9	2.2	1.8	1.3	1.6	3.2	4.3	2.1	3.3	
1977	4.2	3.1	2.5	1.5	1.2	1.3	1.3	2.3	4.4	5.1	7.8	3.3	
1978	4.0	2.3	3.9	1.5	1.4	1.5	2.5	3.5	2.7	3.0	5.0	5.5	
1979	3.6	3.2	2.1	1.5	2.3	2.2	1.5	2.3	2.9	2.4	3.7	4.4	
1980	4.3	4.4	2.6	1.6	1.9	1.6	1.1	1.8	4.0	4.3	3.1	4.0	
1981	3.0	3.8	2.3	2.6	2.0	2.1	1.9	1.4	4.3	3.7	5.6	2.2	
1982	5.4	4.2	4.4	2.5	1.3	1.2	1.4	1.4	3.4	4.7	5.7	1.1	
1983	4.2	5.9	2.4	2.7	1.6	1.7	1.9	2.4	3.3	3.8	5.3	3.9	
1984	5.5	3.7	4.3	3.5	1.8	2.6	1.6	2.7	3.1	5.4	5.0	3.3	
1985	3.9	3.5	4.3	2.6	1.8	3.2	1.9	2.7	3.9	4.4	2.7	5.5	
1986	6.8	2.1	4.7	3.0	1.7	3.1	1.9	2.9	3.3	4.4	6.3	5.6	
1987	3.0	2.5	1.9	1.9	2.4	1.2	1.7	1.5	1.7	2.8	3.5	4.0	

32 YR. STATISTICS FOR WIS STATION S70

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.7
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	237.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	77112118

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	432	1124	56	8							1620
0.50-0.99	.	1399	272	14	20	4					1709
1.00-1.49	.	.	420	10	8	17	2				457
1.50-1.99	.	.	98	3		4	3				108
2.00-2.49	.	.	4								4
2.50-2.99	.	.									0
3.00-3.49	.	.									0
3.50-3.99	.	.									0
4.00-4.49	.	.									0
4.50-4.99	.	.									0
5.00-5.49	.	.									0
5.50-5.99	.	.									0
6.00-6.49	.	.									0
6.50-6.99	.	.									0
7.00+	.	.									0
TOTAL	432	2523	850	35	28	25	5	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.2		MEAN TP(SEC)= 3.2		NO. OF CASES= 3652.						

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	398	952	56	4							1410
0.50-0.99	.	1055	720	7	16	4		.	.	.	1802
1.00-1.49	.	.	788	9	1	3	1	.	.	.	802
1.50-1.99	.	.	105	218	.	.	.	.	.	.	323
2.00-2.49	.	.	.	111	.	.	.	.	.	.	111
2.50-2.99	.	.	.	14	5	.	.	.	.	.	19
3.00-3.49	8	.	.	.	.	.	8
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	398	2007	1669	363	30	7	1	0	0	0	0
MEAN HS(M) = 0.8	LARGEST HS(M)= 3.4		MEAN TP(SEC)= 3.6		NO. OF CASES= 4193.						

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	422	774	49	3							1248
0.50-0.99		859	1441	1	1	2					2304
1.00-1.49			1235	3	1	2					1241
1.50-1.99			59								406
2.00-2.49				347							168
2.50-2.99				168							26
3.00-3.49				8	18						4
3.50-3.99					4						0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	422	1633	2784	530	24	4	0	0	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		3.1	MEAN TP(SEC)=		3.8	NO. OF CASES=		5053.		

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	296	467	39								802
0.50-0.99		636	918	2							1556
1.00-1.49			561								561
1.50-1.99			39	127							166
2.00-2.49				53		1					54
2.50-2.99				4	1						5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	296	1103	1557	186	1	1	0	0	0	0	0
MEAN HS (M) = 0.7	LARGEST HS (M) = 2.6		MEAN TP (SEC) = 3.6		NO. OF CASES = 2944.						

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	239	304	21								564
0.50-0.99		821	530	1							1352
1.00-1.49			240	1							241
1.50-1.99			68	50							118
2.00-2.49				12							12
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	239	1125	859	65	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 2144.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	205	238	12								455
0.50-0.99		434	306								740
1.00-1.49			137	1							138
1.50-1.99			33	32							65
2.00-2.49				17							17
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	205	672	488	50	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 1327.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	161	302	74	8							545
0.50-0.99		433	577	79	2						1091
1.00-1.49			238	21	11	2					272
1.50-1.99			24	35	20	3					82
2.00-2.49				29	11	12	1				53
2.50-2.99				1	1	8					10
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	161	735	913	173	46	25	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 1930.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	214	616	617	93							1540
0.50-0.99		506	1495	596	130	8					2735
1.00-1.49			551	209	163	54					973
1.50-1.99			47	122	91	68					328
2.00-2.49				42	49	36					127
2.50-2.99				4	16	48					68
3.00-3.49					1	9					10
3.50-3.99						1	1				2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	214	1122	2710	1062	450	224	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5418.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	235	758	546	9	18	.	1	.	.	.	1548
0.50-0.99	.	580	1996	366	186	.	.	.	.	.	2961
1.00-1.49	.	.	571	544	177	11	.	.	.	.	1312
1.50-1.99	.	.	63	308	177	26	.	.	.	.	574
2.00-2.49	.	.	.	137	81	41	.	.	.	.	259
2.50-2.99	.	.	.	2	115	28	1	.	.	.	146
3.00-3.49	10	52	1	.	.	.	63
3.50-3.99	31	9	.	.	.	40
4.00-4.49	6	.	.	.	6
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	1338	3176	1366	587	189	18	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6472.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	194	970	597	19	.	.	.	.	.	.	1780
0.50-0.99	.	702	3055	1004	33	.	.	.	.	.	4794
1.00-1.49	.	.	699	806	442	9	.	.	.	.	1956
1.50-1.99	.	.	57	378	345	87	.	.	.	.	867
2.00-2.49	.	.	.	155	135	125	4	.	.	.	419
2.50-2.99	.	.	.	5	154	58	9	1	.	.	227
3.00-3.49	8	113	7	1	.	.	129
3.50-3.99	64	7	3	.	.	74
4.00-4.49	8	12	1	.	.	21
4.50-4.99	1	6	2	.	.	9
5.00-5.49	2	1	.	6
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	194	1672	4408	2367	1117	465	45	15	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 9631.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	296	1167	422	1	1	.	.	.	.	.	1887
0.50-0.99	.	871	3592	513	12	1	.	.	.	.	4989
1.00-1.49	.	.	791	1102	214	5	.	.	.	.	2112
1.50-1.99	.	.	63	386	368	63	1	.	.	.	881
2.00-2.49	.	.	.	151	129	147	1	.	.	.	428
2.50-2.99	.	.	.	7	133	86	17	.	.	.	243
3.00-3.49	14	111	20	7	.	.	152
3.50-3.99	53	26	7	.	.	86
4.00-4.49	5	40	12	1	.	58
4.50-4.99	18	19	.	.	37
5.00-5.49	18	3	.	21
5.50-5.99	5	1	.	6
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	296	2038	4868	2160	871	471	123	68	6	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 10210.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	257	1195	398	22	4	.	.	.	.	.	1876
0.50-0.99	.	841	3575	399	25	3	.	.	.	.	4843
1.00-1.49	.	.	804	1258	180	21	3	.	.	.	2266
1.50-1.99	.	.	54	423	406	85	3	.	.	.	971
2.00-2.49	.	.	.	126	163	175	7	.	.	.	471
2.50-2.99	.	.	.	1	121	98	35	6	.	.	261
3.00-3.49	10	96	22	14	.	.	142
3.50-3.99	35	32	11	2	.	80
4.00-4.49	1	23	13	5	.	42
4.50-4.99	3	11	6	.	20
5.00-5.49	5	1	.	6
5.50-5.99	4	1	5
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	2
TOTAL	257	2036	4831	2229	909	514	128	60	20	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 10293.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	291	1292	1007	27	7	1	.	.	.	.	2625
0.50-0.99	.	993	4476	1707	101	24	2	.	.	.	7303
1.00-1.49	.	.	824	1680	829	111	7	1	1	.	3453
1.50-1.99	.	.	77	388	565	341	13	4	.	.	1388
2.00-2.49	.	.	.	142	160	320	57	6	2	.	687
2.50-2.99	.	.	.	6	130	100	36	24	2	.	318
3.00-3.49	14	112	38	29	1	.	194
3.50-3.99	28	37	23	5	.	93
4.00-4.49	1	17	17	3	1	41
4.50-4.99	4	3	2	.	15
5.00-5.49	3	2	.	5
5.50-5.99	5	.	4
6.00-6.49	1	1
6.50-6.99	1	1
7.00+	291	2285	6384	3950	1806	1038	231	114	31	3	1
TOTAL	291	2285	6384	3950	1806	1038	231	114	31	3	1

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 15109.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	266	1017	828	120	3	.	.	.	.	.	2234
0.50-0.99	.	1735	1700	1274	388	60	1	.	.	.	5158
1.00-1.49	.	.	374	526	426	306	39	1	.	.	1672
1.50-1.99	.	.	79	146	214	167	43	4	.	.	653
2.00-2.49	.	.	1	33	84	159	66	9	.	.	352
2.50-2.99	24	53	56	20	.	.	153
3.00-3.49	3	22	13	10	.	.	48
3.50-3.99	9	3	2	2	.	16
4.00-4.49	7	.	.	.	7
4.50-4.99	3	2	1	.	6
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	266	2752	2982	2099	1142	776	231	48	3	0	0
TOTAL	266	2752	2982	2099	1142	776	231	48	3	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 9649.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	219	560	156	47	8	.	.	.	.	.	990
0.50-0.99	.	1353	219	148	109	38	.	.	.	.	1867
1.00-1.49	.	.	204	32	49	66	2	.	.	.	353
1.50-1.99	.	.	66	3	21	34	12	.	.	.	136
2.00-2.49	.	.	3	6	2	8	9	7	.	.	35
2.50-2.99	.	.	.	1	.	1	3	2	.	.	7
3.00-3.49	1	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	219	1913	648	237	189	147	27	9	0	0	0
TOTAL	219	1913	648	237	189	147	27	9	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 3178.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	313	685	24	3	.	.	.	.	.	.	1025
0.50-0.99	.	1008	109	1	3	7	.	.	.	.	1128
1.00-1.49	.	.	202	.	1	4	.	.	.	.	207
1.50-1.99	.	.	83	.	.	3	1	1	.	.	88
2.00-2.49	.	.	3	5	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	313	1693	421	9	4	14	1	1	0	0	0
TOTAL	313	1693	421	9	4	14	1	1	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 2301.

STATION S71 47.80N 85.37W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

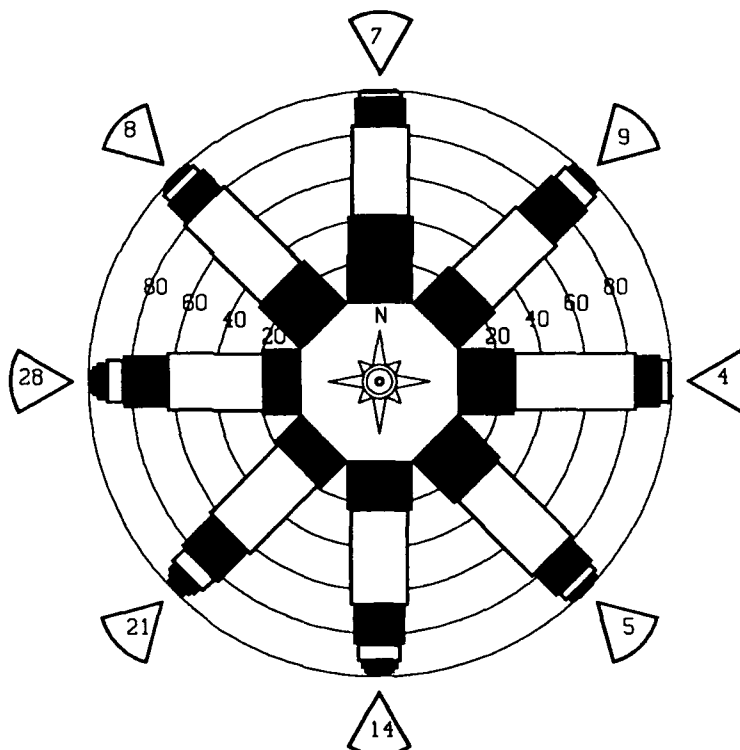
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	444	1242	491	36	2	15	.	.	.	.	2215
0.50-0.99	.	1423	2498	611	86	61	.	.	.	.	4633
1.00-1.49	.	.	864	620	251	81	5	.	.	.	1801
1.50-1.99	.	.	102	297	221	88	7	.	.	.	715
2.00-2.49	.	.	1	119	81	102	14	2	.	.	319
2.50-2.99	.	.	.	5	72	48	17	5	.	.	147
3.00-3.49	7	51	10	6	.	.	74
3.50-3.99	22	11	4	.	.	37
4.00-4.49	1	10	4	1	.	16
4.50-4.99	3	4	.	.	8
5.00-5.49	3	.	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	444	2665	3956	1688	720	388	77	28	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION 71
47.80N, 85.37 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S71 (47.80N 85.37W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.9	0.7	0.7	0.5	0.5	0.4	0.5	0.5	0.9	0.7	0.7	0.6
1957	1.0	1.0	0.7	0.7	0.7	0.6	0.5	0.5	0.8	0.6	1.0	1.0	0.8
1958	0.0	0.8	0.7	0.7	0.7	0.6	0.5	0.5	0.7	0.7	1.3	1.0	0.9
1959	0.0	0.9	0.7	0.6	0.7	0.5	0.6	0.4	0.7	0.7	1.0	0.9	0.7
1960	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.8	1.1	1.0	0.7
1961	0.7	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.8	0.8	1.0	0.9	0.7
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
1964	1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1966	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1967	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1968	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1969	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1970	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
1971	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.1	1.0	1.0	0.8	0.7	0.6	0.6	0.6	0.8	1.0	1.2	1.1	1.1

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S71 (47.80N 85.37W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1957	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1958	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1959	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1960	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1961	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1962	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1963	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1964	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1965	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1966	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1967	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1968	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1969	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1970	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1971	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1972	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1973	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1974	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1975	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1976	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1977	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1978	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1979	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1980	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1981	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1982	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1983	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1984	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1985	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1986	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6
1987	1.6	2.4	2.4	2.0	1.7	1.7	1.1	1.0	1.7	2.7	2.1	2.1	1.6

32 YR. STATISTICS FOR WIS STATION S71

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	253.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	77112118

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	422	1033	118	21	1	.	.	.	.	.	1595
0.50-0.99	.	1452	220	54	67	8	.	.	.	.	1801
1.00-1.49	.	.	382	33	24	34	.	.	.	.	473
1.50-1.99	.	.	103	6	1	9	3	.	.	.	122
2.00-2.49	.	.	4	1	.	.	.	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	422	2485	827	115	93	51	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3744.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	359	973	118	13	.	.	.	.	.	.	1463
0.50-0.99	.	1402	712	42	33	6	.	.	.	.	2195
1.00-1.49	.	.	503	87	9	6	1	.	.	.	606
1.50-1.99	.	.	174	117	1	3	1	.	.	.	296
2.00-2.49	.	.	12	26	1	.	.	.	.	.	39
2.50-2.99	.	.	.	3	3	.	.	.	.	.	6
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	359	2375	1519	288	47	15	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 4315.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	412	1013	88	3	.	.	.	.	.	.	1516
0.50-0.99	.	1306	1367	11	7	.	.	.	.	.	2691
1.00-1.49	.	.	663	114	4	.	.	.	.	.	781
1.50-1.99	.	.	64	274	.	.	.	.	.	.	338
2.00-2.49	.	.	5	41	6	.	.	.	.	.	55
2.50-2.99	.	.	.	1	3	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	412	2319	2187	444	23	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 5044.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	241	565	50	1	.	.	.	.	.	.	857
0.50-0.99	.	676	766	9	1	.	.	.	.	.	1452
1.00-1.49	.	.	459	27	2	.	.	.	.	.	488
1.50-1.99	.	.	28	116	1	.	.	.	.	.	145
2.00-2.49	.	.	.	51	.	.	.	.	.	.	51
2.50-2.99	.	.	.	1	1	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	241	1241	1303	205	5	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 2808.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	183	449	31	2	.	.	.	.	.	.	663
0.50-0.99	.	417	725	2	.	.	.	.	.	.	1144
1.00-1.49	.	.	418	8	2	.	.	.	.	.	428
1.50-1.99	.	.	34	99	2	1	.	.	.	.	136
2.00-2.49	.	.	.	68	2	4	.	.	.	.	74
2.50-2.99	.	.	.	3	2	.	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	183	866	1208	180	8	5	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 2295.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	161	301	17	.	.	.	.	.	.	.	479
0.50-0.99	.	222	520	1	.	.	.	.	.	.	743
1.00-1.49	.	.	207	19	2	.	.	.	.	.	228
1.50-1.99	.	.	13	68	6	.	.	.	.	.	88
2.00-2.49	.	.	.	32	9	1	.	.	.	.	42
2.50-2.99	.	.	.	1	11	3	.	.	.	.	15
3.00-3.49	4	.	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	161	523	757	122	28	8	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 1502.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	145	317	130	12	.	.	.	.	.	.	604
0.50-0.99	.	349	819	211	13	.	.	.	.	.	1392
1.00-1.49	.	.	231	162	69	4	.	.	.	.	466
1.50-1.99	.	.	8	83	41	14	.	.	.	.	146
2.00-2.49	.	.	.	14	20	10	.	.	.	.	44
2.50-2.99	35	7	1	.	.	.	43
3.00-3.49	1	22	.	.	.	.	23
3.50-3.99	7	1	.	.	.	8
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	145	666	1188	482	179	64	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 2561.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	168	622	647	43	.	.	.	.	.	.	1480
0.50-0.99	.	476	1756	687	64	1	.	.	.	.	2984
1.00-1.49	.	.	349	427	220	14	.	.	.	.	1010
1.50-1.99	.	.	24	160	127	45	.	.	.	.	356
2.00-2.49	.	.	.	57	37	45	.	.	.	.	139
2.50-2.99	48	22	.	.	.	.	70
3.00-3.49	2	38	.	.	.	.	40
3.50-3.99	10	.	.	.	.	10
4.00-4.49	2	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	168	1098	2776	1374	498	175	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 5708.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	209	836	371	8	.	.	.	.	.	.	1424
0.50-0.99	.	536	2190	297	8	.	.	.	.	.	3031
1.00-1.49	.	.	535	627	164	5	.	.	.	.	1331
1.50-1.99	.	.	36	329	209	19	.	.	.	.	593
2.00-2.49	.	.	.	135	106	37	.	.	.	.	278
2.50-2.99	.	.	.	2	108	36	1	.	.	.	147
3.00-3.49	4	89	1	.	.	.	94
3.50-3.99	34	9	.	.	.	43
4.00-4.49	3	11	1	.	.	15
4.50-4.99	1	1	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	209	1372	3132	1398	599	223	23	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6519.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	235	902	487	6	.	.	.	.	.	.	1630
0.50-0.99	.	715	3179	882	7	.	.	.	.	.	4783
1.00-1.49	.	.	711	1007	398	1	.	.	.	.	2117
1.50-1.99	.	.	66	345	433	90	.	.	.	.	934
2.00-2.49	.	.	.	154	143	148	3	.	.	.	448
2.50-2.99	.	.	.	7	144	90	10	.	.	.	251
3.00-3.49	22	119	8	2	.	.	151
3.50-3.99	1	44	11	1	.	.	57
4.00-4.49	6	9	5	.	.	20
4.50-4.99	1	7	5	.	.	13
5.00-5.49	6	.	.	6
5.50-5.99	3	.	3
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	235	1617	4443	2401	1148	499	48	19	4	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 9754.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	311	1131	329	2	.	.	.	.	.	.	1773
0.50-0.99	.	808	3128	340	10	.	.	.	.	.	4286
1.00-1.49	.	.	724	944	144	.	.	.	.	.	1819
1.50-1.99	.	.	48	374	342	47	.	.	.	.	811
2.00-2.49	.	.	.	136	132	122	1	.	.	.	391
2.50-2.99	.	.	.	4	115	80	21	1	.	.	221
3.00-3.49	19	94	14	4	.	.	131
3.50-3.99	52	28	6	1	.	87
4.00-4.49	7	47	7	1	.	60
4.50-4.99	1	11	25	1	.	38
5.00-5.49	14	2	.	16
5.50-5.99	4	1	.	5
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	0
TOTAL	311	1939	4229	1800	762	408	122	61	8	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 9029.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	248	1115	333	23	3	.	.	.	.	.	1722
0.50-0.99	.	825	3319	353	25	1	.	.	.	.	4523
1.00-1.49	.	1	768	1145	142	27	4	.	.	.	2085
1.50-1.99	.	.	62	396	371	73	4	.	.	.	906
2.00-2.49	.	.	.	108	162	167	11	.	.	.	448
2.50-2.99	.	.	.	2	126	84	26	5	.	.	243
3.00-3.49	8	87	26	16	1	.	138
3.50-3.99	31	27	13	1	.	72
4.00-4.49	2	18	10	6	.	36
4.50-4.99	1	17	2	.	20
5.00-5.49	1	9	3	.	12
5.50-5.99	1	1	4
6.00-6.49	1	.	1
6.50-6.99	1	.	1
7.00+	1	.	1
TOTAL	248	1941	4480	2027	837	472	118	70	18	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.6 NO. OF CASES= 9568.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	303	1294	786	22	3	18	1	.	.	.	2408
0.50-0.99	.	909	4322	1280	36	48	8	.	.	.	6566
1.00-1.49	.	.	796	1851	622	174	7	2	.	.	3327
1.50-1.99	.	.	70	410	622	282	312	22	.	.	1403
2.00-2.49	.	.	.	125	174	312	47	33	1	.	662
2.50-2.99	.	.	.	2	133	105	48	22	1	.	311
3.00-3.49	7	91	37	18	3	.	149
3.50-3.99	26	37	24	3	.	92
4.00-4.49	2	14	16	3	.	36
4.50-4.99	3	11	4	1	20
5.00-5.49	5	1	.	6
5.50-5.99	5	.	4
6.00-6.49	0
6.50-6.99	0
7.00+	1	1
TOTAL	303	2203	5974	3690	1607	884	197	103	27	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 14034.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	234	1060	843	56	226	17	.	.	.	.	2193
0.50-0.99	.	1221	2397	1266	587	229	9	1	.	.	5127
1.00-1.49	.	.	447	963	587	229	9	1	.	.	2236
1.50-1.99	.	.	48	245	247	247	31	.	.	.	818
2.00-2.49	.	.	1	52	158	140	52	6	.	.	409
2.50-2.99	.	.	.	2	48	125	55	12	.	.	242
3.00-3.49	5	47	50	12	.	.	114
3.50-3.99	8	16	7	.	.	31
4.00-4.49	5	6	2	.	13
4.50-4.99	3	2	1	.	6
5.00-5.49	1	1	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	234	2281	3736	2584	1271	813	221	47	4	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 10479.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	178	550	346	44	150	19	.	.	.	.	1118
0.50-0.99	.	1109	537	357	150	134	6	.	.	.	2172
1.00-1.49	.	.	150	175	135	134	6	.	.	.	600
1.50-1.99	.	.	35	57	33	69	17	.	.	.	231
2.00-2.49	.	.	2	3	31	28	16	2	.	.	82
2.50-2.99	.	.	.	1	1	12	19	7	.	.	40
3.00-3.49	1	5	.	.	6
3.50-3.99	1	1	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	178	1659	1070	637	370	262	60	15	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 3988.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	296	619	59	5	24	10	.	.	.	.	979
0.50-0.99	.	857	113	35	24	12	.	.	.	.	1039
1.00-1.49	.	.	145	5	18	11	.	.	.	.	180
1.50-1.99	.	.	59	4	7	11	1	1	.	.	83
2.00-2.49	.	.	2	4	4	3	.	.	.	.	13
2.50-2.99	2	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	296	1476	378	53	53	38	1	1	0	0	

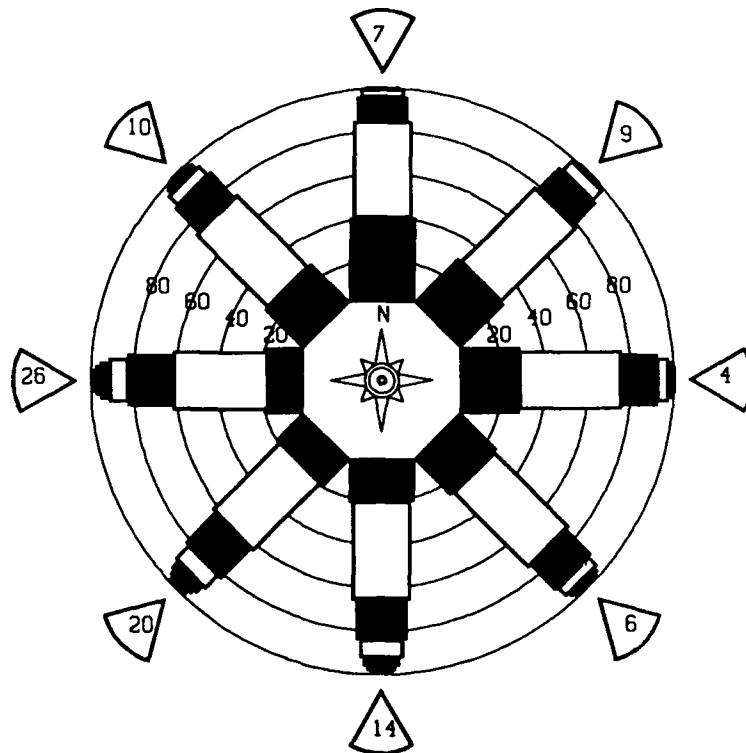
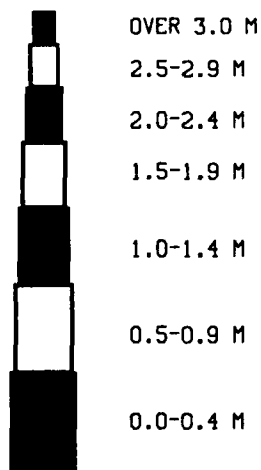
MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2156.

STATION S72 47.80N 85.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	411	1278	476	26	67	8	.	.	.	.	2191
0.50-0.99	.	1328	2607	583	234	52	.	.	.	.	4593
1.00-1.49	.	.	749	760	247	91	2	.	.	.	1817
1.50-1.99	.	.	87	309	247	91	13	.	.	.	740
2.00-2.49	.	.	2	101	99	102	16	1	.	.	318
2.50-2.99	.	.	.	3	78	57	13	4	.	.	160
3.00-3.49	7	21	13	3	.	.	84
3.50-3.99	1	10	2	1	.	39
4.00-4.49	16
4.50-4.99	3
5.00-5.49	3	.	.	3
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	411	2606	3921	1782	752	391	77	28	2	0	93504

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION 72
47.80N, 85.57 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S72 (47.80N 85.57W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.9	0.7	0.7	0.6	0.5	0.4	0.5	0.6	0.9	0.8	0.7	0.6
1957	1.0	1.0	0.8	0.7	0.7	0.6	0.5	0.5	0.8	0.6	1.0	1.0	0.8
1958	0.6	0.8	0.4	0.7	0.7	0.6	0.5	0.5	0.7	0.7	1.3	0.9	0.7
1959	0.9	0.9	0.8	0.6	0.7	0.5	0.6	0.4	0.7	0.7	1.0	0.8	0.7
1960	0.8	0.7	0.6	0.7	0.5	0.5	0.5	0.6	0.6	0.8	1.1	1.0	0.7
1961	0.7	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.8	0.8	1.0	0.9	0.7
1962	1.1	0.7	0.5	0.6	0.5	0.4	0.4	0.5	0.6	0.7	1.0	1.0	0.7
1963	1.1	1.1	1.0	0.8	0.8	0.6	0.6	0.6	0.8	1.0	1.0	1.2	0.9
1964	1.3	1.2	1.1	1.1	0.9	0.7	0.6	0.9	1.0	1.1	1.1	1.1	1.0
1965	1.4	1.5	0.9	0.8	0.8	0.8	0.8	0.6	0.9	1.1	1.3	1.2	1.0
1966	1.2	1.4	1.4	0.9	0.9	0.8	0.8	0.7	1.1	1.4	1.3	1.3	1.1
1967	1.3	1.4	1.4	0.9	0.9	0.8	0.7	0.7	1.0	1.4	1.3	1.7	1.1
1968	1.3	1.5	1.4	1.1	0.9	0.7	0.8	0.7	0.9	1.3	1.3	1.3	1.1
1969	1.5	1.0	1.1	0.8	0.8	0.8	0.6	0.8	0.9	1.2	1.2	1.0	1.0
1970	1.1	1.4	1.1	1.1	0.9	0.7	0.6	0.6	1.1	1.4	1.2	1.1	1.0
1971	1.2	1.3	1.1	0.9	0.7	0.5	0.7	0.6	0.9	1.2	1.1	1.2	1.0
1972	1.5	1.1	1.0	0.8	0.5	0.5	0.5	0.6	1.0	1.2	1.0	1.0	0.9
1973	1.2	1.1	1.0	0.9	0.7	0.5	0.6	0.6	0.9	1.1	1.2	1.0	0.9
1974	1.1	0.9	1.2	0.8	0.6	0.7	0.6	0.7	0.9	1.1	1.2	1.0	0.9
1975	1.1	0.8	0.8	0.5	0.5	0.6	0.6	0.8	0.8	1.3	1.3	1.2	0.9
1976	1.5	1.3	1.5	0.8	0.7	0.6	0.5	0.6	0.8	0.8	1.2	1.1	1.0
1977	1.1	1.1	0.9	0.6	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.8
1978	1.0	0.8	1.0	0.7	0.6	0.6	0.6	1.2	0.9	1.3	1.5	1.6	1.0
1979	1.0	0.8	0.9	0.6	0.5	0.6	0.5	0.6	0.9	0.7	1.5	1.7	0.9
1980	1.1	0.8	1.2	0.7	0.6	0.5	0.4	0.6	1.0	1.1	1.0	1.2	0.8
1981	0.9	1.1	0.8	0.8	0.6	0.6	0.5	0.4	0.8	1.0	1.1	1.0	0.8
1982	1.3	1.2	1.4	0.9	0.6	0.6	0.6	0.5	0.9	1.1	1.3	1.3	1.0
1983	1.2	1.1	1.0	0.7	0.6	0.6	0.6	0.6	1.0	1.1	1.5	1.3	0.9
1984	1.4	1.2	1.0	0.8	0.7	0.6	0.5	0.5	0.9	1.2	1.6	1.5	1.0
1985	1.2	1.1	1.2	0.8	0.6	0.7	0.6	0.7	1.2	1.3	1.0	1.3	1.0
1986	1.4	0.7	1.3	1.0	0.7	0.7	0.5	0.7	1.0	1.1	1.5	1.6	1.0
1987	1.1	0.9	1.0	0.7	0.6	0.5	0.6	0.7	0.6	1.0	1.1	1.2	0.8
MEAN	1.1	1.0	1.0	0.8	0.7	0.6	0.6	0.6	0.9	1.0	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S72 (47.80N 85.57W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.7	2.8	2.2	2.1	1.7	1.7	1.1	1.0	2.0	2.8	2.2	2.2	
1957	3.2	3.1	2.5	2.0	2.6	3.3	2.1	1.5	2.5	1.6	2.5	3.3	
1958	2.4	2.4	1.3	4.3	2.3	1.9	1.5	1.4	2.0	2.2	7.4	2.8	
1959	3.9	4.9	2.5	2.0	3.8	1.5	1.6	1.6	2.1	2.3	2.8	3.7	
1960	2.5	1.9	2.9	2.4	1.2	1.3	1.5	2.2	1.7	2.7	3.3	3.4	
1961	2.4	2.3	3.3	2.0	2.0	1.8	1.3	2.0	2.1	2.3	4.1	2.9	
1962	2.8	1.9	2.0	2.0	1.5	1.4	1.3	1.4	2.0	3.7	2.9	4.4	
1963	2.7	3.2	2.7	3.0	2.3	2.5	1.9	1.3	2.0	3.3	3.4	3.2	
1964	5.7	4.6	3.7	4.7	3.3	3.3	2.7	2.7	4.1	3.9	5.7	3.2	
1965	4.1	3.5	2.9	3.0	2.3	2.7	1.9	1.1	2.2	4.1	4.4	3.3	
1966	3.7	4.0	3.3	3.5	2.3	2.3	2.3	2.6	3.3	3.3	3.3	3.8	
1967	4.0	3.9	3.7	3.1	3.3	0.0	1.5	1.7	2.2	4.5	3.3	4.4	
1968	4.1	5.0	4.4	3.6	2.7	2.2	2.4	2.2	2.9	4.0	3.4	3.7	
1969	4.2	3.4	3.4	3.9	2.5	2.1	2.2	2.3	3.3	4.4	3.9	3.4	
1970	3.0	4.4	3.3	3.3	2.7	1.1	1.9	1.6	3.3	3.3	4.7	4.4	
1971	3.8	3.7	3.9	2.0	2.9	1.5	2.4	1.6	3.3	3.3	4.4	3.5	
1972	4.2	4.1	2.7	2.7	1.1	1.4	1.4	1.6	3.3	4.0	3.8	3.2	
1973	3.1	3.3	4.1	2.8	1.8	1.3	1.8	1.1	3.7	3.7	3.6	4.4	
1974	3.8	3.7	3.2	2.7	2.2	1.7	1.5	1.6	3.3	3.5	3.3	3.3	
1975	4.9	2.7	2.3	1.5	1.9	2.2	1.8	3.1	3.1	4.4	4.6	3.3	
1976	6.4	4.4	4.4	4.4	2.8	2.0	1.5	2.2	3.9	4.4	4.4	3.3	
1977	3.7	3.3	2.2	1.8	1.9	1.1	2.2	2.0	4.4	7.7	7.3	3.3	
1978	3.5	3.3	2.2	1.1	1.1	1.5	2.2	2.2	4.4	4.4	4.4	3.3	
1979	3.3	3.3	3.3	1.1	1.9	1.8	1.3	1.1	2.2	3.3	4.4	4.4	
1980	6.3	3.5	3.0	3.0	1.6	2.2	1.2	1.9	3.3	3.3	3.3	2.2	
1981	2.8	3.4	3.0	3.0	1.6	2.9	1.5	1.4	4.4	3.6	5.5	5.5	
1982	5.1	4.4	6.1	4.7	1.5	1.7	1.5	1.4	3.3	3.3	3.3	3.3	
1983	4.0	5.5	2.5	2.4	1.7	1.7	2.4	2.0	3.3	3.3	5.1	3.3	
1984	5.1	3.1	4.1	3.9	2.0	2.7	1.3	2.2	3.3	3.3	4.4	6.0	
1985	4.8	4.0	4.7	2.8	1.8	3.0	1.7	2.2	3.3	3.3	2.9	3.3	
1986	6.0	2.6	4.5	2.8	1.8	2.6	1.1	1.8	3.3	3.3	6.4	5.5	
1987	3.5	3.8	3.5	3.1	3.0	1.3	2.0	2.3	1.7	3.2	3.9	4.6	

32 YR. STATISTICS FOR WIS STATION S72

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	275.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	357	934	304	17							1612
0.50-0.99		1264	350	290	71	4					1979
1.00-1.49			294	100	180	56					630
1.50-1.99			117	5	20	65					210
2.00-2.49			5	1	4	13					25
2.50-2.99						1					1
3.00-3.49								1			1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	357	2198	1070	413	275	139	6	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4179.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	304	900	206	9							1419
0.50-0.99		1546	559	129	41	3					2278
1.00-1.49			426	156	53	13					648
1.50-1.99			265	32	7	20		1			325
2.00-2.49			5	21		1					27
2.50-2.99				2				1			3
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	304	2446	1461	349	101	37	0	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4403.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	402	1038	128	10							1578
0.50-0.99		1641	1202	47	7	1					2898
1.00-1.49			408	194	9						611
1.50-1.99			143	105		1					249
2.00-2.49			4	18	6						28
2.50-2.99				1	1						2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	402	2679	1885	375	23	2	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5024.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	189	583	70	1							843
0.50-0.99		747	784	23	1						1555
1.00-1.49			311	52	4						367
1.50-1.99			42	99	2						143
2.00-2.49			1	33	3						37
2.50-2.99				1	11						12
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	189	1330	1208	209	22	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 2773.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	150	423	43	1	.	.	.	.	.	.	617
0.50-0.99	.	363	816	19	.	.	.	.	.	.	1198
1.00-1.49	.	.	336	41	7	.	.	.	.	.	382
1.50-1.99	.	.	13	148	5	.	.	.	.	.	173
2.00-2.49	.	.	.	71	17	5	.	.	.	.	93
2.50-2.99	.	.	.	2	29	1	.	.	.	.	32
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	150	786	1208	282	59	11	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 2343.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	133	299	25	.	.	.	.	.	.	.	457
0.50-0.99	.	221	587	9	.	.	.	.	.	.	817
1.00-1.49	.	.	193	81	4	.	.	.	.	.	278
1.50-1.99	.	.	4	96	17	3	.	.	.	.	120
2.00-2.49	.	.	.	25	27	7	.	.	.	.	59
2.50-2.99	.	.	.	1	24	5	.	.	.	.	30
3.00-3.49	3	11	1	.	.	.	15
3.50-3.99	4	.	.	.	.	4
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	133	520	809	212	75	30	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 1673.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	139	355	181	13	.	.	.	.	.	.	688
0.50-0.99	.	331	919	295	26	.	.	.	.	.	1571
1.00-1.49	.	.	213	218	127	10	.	.	.	.	568
1.50-1.99	.	.	8	84	60	28	.	.	.	.	180
2.00-2.49	.	.	.	13	12	29	.	.	.	.	54
2.50-2.99	28	8	.	.	.	.	36
3.00-3.49	27	.	.	.	.	27
3.50-3.99	9	.	.	.	.	9
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	139	686	1321	623	253	112	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 2945.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	149	675	591	25	.	.	.	.	.	.	1440
0.50-0.99	.	418	1915	637	32	.	.	.	.	.	3002
1.00-1.49	.	.	375	466	226	16	.	.	.	.	1083
1.50-1.99	.	.	25	154	151	38	.	.	.	.	368
2.00-2.49	.	.	.	60	48	50	1	.	.	.	159
2.50-2.99	.	.	.	1	45	20	2	.	.	.	68
3.00-3.49	3	34	1	.	.	.	38
3.50-3.99	11	3	.	.	.	14
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	149	1093	2906	1343	505	169	8	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 5783.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	187	835	317	3	.	.	.	.	.	.	1342
0.50-0.99	.	572	2127	275	132	1	.	.	.	.	2975
1.00-1.49	.	.	601	556	132	2	.	.	.	.	1291
1.50-1.99	.	.	84	253	241	26	.	.	.	.	604
2.00-2.49	.	.	.	97	127	60	.	.	.	.	284
2.50-2.99	.	.	.	9	41	74	3	.	.	.	127
3.00-3.49	2	57	3	.	.	.	62
3.50-3.99	11	11	.	.	.	22
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	187	1407	3129	1193	543	231	17	0	0	0	6283.

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 6283.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	239	936	465	7	.	.	.	.	.	.	1647
0.50-0.99	.	680	3218	829	3	.	.	.	.	.	4730
1.00-1.49	.	.	729	1215	355	3	.	.	.	.	2302
1.50-1.99	.	.	95	313	550	64	.	.	.	.	1022
2.00-2.49	.	.	.	117	198	202	2	.	.	.	519
2.50-2.99	.	.	.	7	98	168	14	.	.	.	287
3.00-3.49	9	129	18	4	.	.	160
3.50-3.99	1	31	24	3	.	.	59
4.00-4.49	2	13	12	.	.	22
4.50-4.99	5	9	.	.	17
5.00-5.49	2	.	.	9
5.50-5.99	1	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	239	1616	4507	2488	1214	599	76	37	1	0	10093.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10093.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	309	1050	272	2	1	.	.	.	.	.	1634
0.50-0.99	.	676	2760	229	7	.	.	.	.	.	3672
1.00-1.49	.	.	632	818	103	6	.	.	.	.	1559
1.50-1.99	.	.	48	348	325	34	.	.	.	.	755
2.00-2.49	.	.	.	117	136	118	1	.	.	.	372
2.50-2.99	.	.	.	3	104	70	14	1	.	.	192
3.00-3.49	12	89	19	4	.	.	124
3.50-3.99	42	34	3	.	.	79
4.00-4.49	4	37	5	.	.	66
4.50-4.99	11	21	1	.	33
5.00-5.49	6	.	.	6
5.50-5.99	3	.	.	4
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	0
TOTAL	309	1726	3712	1517	688	363	136	43	4	0	7963.

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 7963.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	279	1132	283	21	1	.	.	.	.	.	1716
0.50-0.99	.	717	2993	297	37	4	.	.	.	.	4048
1.00-1.49	.	.	706	1057	115	34	3	.	.	.	1915
1.50-1.99	.	.	49	409	333	52	2	.	.	.	845
2.00-2.49	.	.	.	93	147	155	10	1	.	.	406
2.50-2.99	97	94	24	2	.	.	217
3.00-3.49	5	99	26	12	1	.	143
3.50-3.99	21	31	16	2	.	70
4.00-4.49	22	9	1	.	32
4.50-4.99	1	16	3	.	20
5.00-5.49	9	2	.	11
5.50-5.99	1	.	1
6.00-6.49	2	.	2
6.50-6.99	0
7.00+	1	.	1
TOTAL	279	1849	4031	1877	735	459	119	65	13	0	8830.

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8830.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	276	1318	566	16	1	.	.	.	.	.	2177
0.50-0.99	.	700	4182	784	13	10	.	.	.	.	5689
1.00-1.49	.	.	720	1953	285	22	7	1	.	.	2988
1.50-1.99	.	.	51	426	701	176	1	3	.	.	1358
2.00-2.49	.	.	1	121	199	319	18	5	1	.	664
2.50-2.99	.	.	.	8	131	108	42	11	2	.	302
3.00-3.49	9	93	25	21	2	.	150
3.50-3.99	25	29	20	2	.	76
4.00-4.49	2	16	19	3	1	41
4.50-4.99	1	13	8	1	23
5.00-5.49	4	3	.	7
5.50-5.99	3	.	3
6.00-6.49	1	3	1	5
6.50-6.99	1	1
7.00+	1	.	1
TOTAL	276	2018	5520	3308	1339	755	139	98	28	4	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 12633.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	198	1013	712	21	.	.	.	.	.	.	1944
0.50-0.99	.	648	3156	1109	66	4	1	.	.	.	4984
1.00-1.49	.	.	644	1056	509	81	2	1	.	.	2293
1.50-1.99	.	.	50	308	321	205	5	.	.	.	889
2.00-2.49	.	.	.	121	79	151	39	2	.	.	392
2.50-2.99	.	.	.	5	133	53	28	2	.	.	221
3.00-3.49	12	105	26	8	.	.	151
3.50-3.99	49	32	6	.	.	87
4.00-4.49	3	28	6	1	.	38
4.50-4.99	2	8	1	.	11
5.00-5.49	2	.	2
5.50-5.99	2	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	198	1661	4562	2620	1120	651	163	33	6	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10316.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	152	464	442	19	.	.	.	.	.	.	1077
0.50-0.99	.	587	1320	530	87	1	.	.	.	.	2525
1.00-1.49	.	.	435	420	249	79	.	.	.	.	1183
1.50-1.99	.	.	42	240	143	118	5	.	.	.	548
2.00-2.49	.	.	1	91	51	75	21	.	.	.	239
2.50-2.99	.	.	.	5	90	21	10	.	.	.	126
3.00-3.49	3	82	12	1	.	.	98
3.50-3.99	35	21	.	.	.	56
4.00-4.49	1	19	3	.	.	23
4.50-4.99	3	.	.	.	6
5.00-5.49	3	1	.	4
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	152	1051	2240	1305	623	412	91	10	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 5518.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	212	552	108	4	.	.	.	.	.	.	876
0.50-0.99	.	567	432	158	10	2	.	.	.	.	1178
1.00-1.49	.	.	207	144	79	20	.	.	.	.	446
1.50-1.99	.	.	48	82	49	49	.	.	.	.	228
2.00-2.49	.	.	1	39	17	28	.	.	.	.	89
2.50-2.99	.	.	.	1	33	23	1	.	.	.	51
3.00-3.49	1	27	3	.	.	.	31
3.50-3.99	4	1	.	.	.	13
4.00-4.49	5	.	.	.	7
4.50-4.99	2	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	212	1119	796	428	199	143	21	5	0	0	

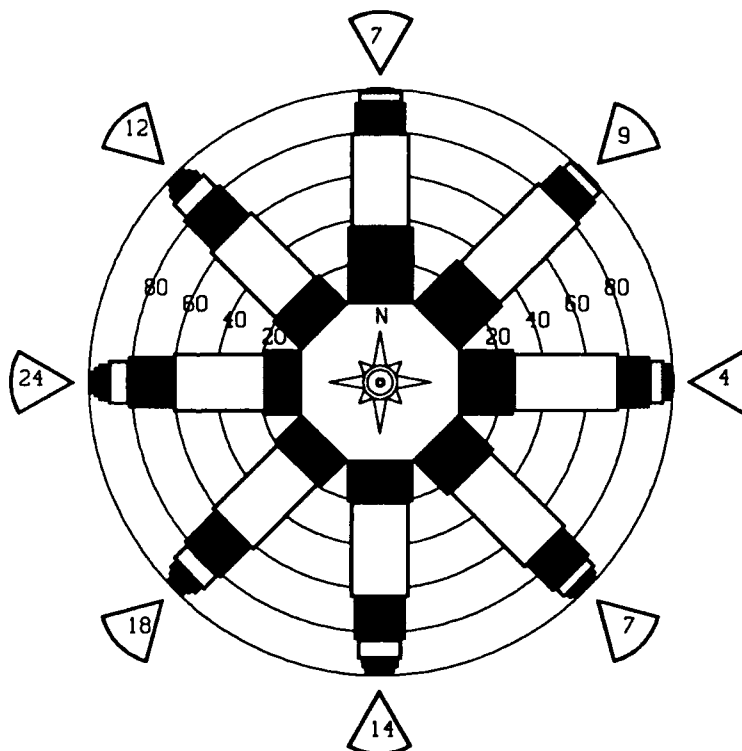
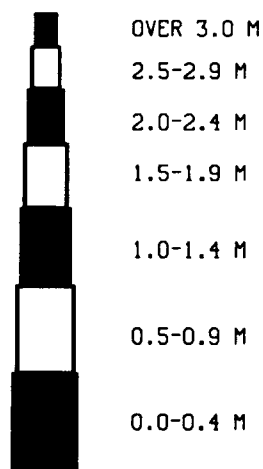
MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 2745.

STATION S73 47.80N 85.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	368	1251	472	17	41	3	.	.	.	.	2108
0.50-0.99	.	1168	2732	566	243	34	1	.	.	.	4510
1.00-1.49	.	.	723	853	293	88	1	.	.	.	1854
1.50-1.99	.	.	109	310	107	122	10	.	.	.	801
2.00-2.49	.	.	1	104	87	64	14	.	.	.	344
2.50-2.99	.	.	.	4	6	75	13	1	.	.	170
3.00-3.49	24	19	5	.	.	99
3.50-3.99	1	16	7	.	.	47
4.00-4.49	2	.	1	.	22
4.50-4.99	3	.	.	10
5.00-5.49	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	368	2419	4037	1854	777	411	76	25	1	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.

STATION 73
47.80N, 85.78 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S73 (47.80N 85.78W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	1.0	0.8	0.7	0.6	0.5	0.4	0.5	0.6	1.0	0.8	0.8	0.7
1957	1.0	1.1	0.8	0.8	0.7	0.7	0.3	0.6	0.8	0.7	1.0	1.1	0.8
1958	0.7	0.8	0.4	0.7	0.7	0.6	0.3	0.3	0.7	0.8	1.4	0.8	0.7
1959	0.9	0.9	0.8	0.7	0.7	0.5	0.6	0.5	0.7	0.7	1.0	0.9	0.7
1960	0.8	0.8	0.6	0.7	0.5	0.5	0.3	0.5	0.6	0.9	1.2	1.0	0.7
1961	0.8	0.8	0.6	0.6	0.6	0.4	0.3	0.5	0.8	0.8	1.1	0.9	0.7
1962	1.1	0.7	0.6	0.6	0.6	0.5	0.3	0.5	0.7	0.7	1.0	1.1	0.7
1963	1.1	1.2	1.1	0.9	0.8	0.6	0.7	0.6	0.8	1.0	1.1	1.2	0.9
1964	1.1	1.3	1.1	1.1	1.0	0.8	0.6	0.9	1.0	1.1	1.1	1.1	1.1
1965	1.1	1.5	0.9	0.8	0.9	0.8	0.8	0.7	1.0	1.2	1.4	1.3	1.1
1966	1.1	1.5	1.1	0.9	1.0	0.8	0.8	0.7	1.2	1.1	1.3	1.3	1.1
1967	1.1	1.5	1.1	0.9	1.0	0.8	0.7	1.1	1.1	1.4	1.4	1.7	1.1
1968	1.1	1.6	1.1	1.2	0.9	0.7	0.8	0.8	0.9	1.1	1.3	1.4	1.1
1969	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.9	0.9	1.1	1.3	1.1	1.1
1970	1.1	1.1	1.1	1.1	0.9	0.7	0.8	0.8	1.1	1.4	1.1	1.1	1.1
1971	1.1	1.3	1.1	1.1	0.7	0.6	0.7	0.8	0.9	1.1	1.2	1.1	1.1
1972	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.2	1.1	0.9	0.7	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	0.9	0.8	0.7	0.7	0.8	0.8	0.9	1.1	1.1	1.1	1.1
1975	1.1	1.1	0.8	0.5	0.5	0.5	0.5	0.8	0.9	1.1	1.1	1.1	1.1
1976	1.1	1.6	1.4	1.0	0.7	0.7	0.7	0.8	0.9	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	0.9	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.1	1.1
1978	1.1	1.1	1.1	0.9	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.1	1.1
1979	1.1	1.1	1.1	0.9	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.1	1.1
1980	1.1	1.1	1.1	0.9	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.1	1.1
1981	0.9	1.1	0.8	0.8	0.8	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	0.8	0.7	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.1
1987	1.2	1.0	1.1	0.7	0.6	0.5	0.6	0.7	0.8	1.0	1.2	1.2	0.9
MEAN	1.2	1.1	1.1	0.8	0.7	0.6	0.6	0.6	0.9	1.1	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S73 (47.80N 85.78W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.8	3.4	2.3	2.4	1.8	1.7	1.2	1.1	2.5	2.9	2.2	2.4	
1957	3.2	3.1	2.6	2.0	2.2	3.3	2.4	1.6	2.6	2.2	2.2	3.3	
1958	3.4	3.6	2.4	2.4	2.6	3.3	1.9	1.6	2.2	2.2	2.2	3.3	
1959	3.9	3.8	2.6	2.2	2.5	3.7	1.1	1.6	2.2	2.2	2.2	3.3	
1960	3.5	2.2	2.5	2.2	2.2	2.2	1.1	1.3	2.2	2.2	2.2	3.3	
1961	3.5	2.5	2.5	2.2	2.2	2.2	1.4	1.3	2.2	2.2	2.2	3.3	
1962	3.2	2.5	2.5	2.2	2.2	2.2	1.4	1.3	2.2	2.2	2.2	3.3	
1963	2.2	4.1	2.8	2.9	2.5	2.3	2.2	1.3	2.2	2.2	2.2	3.3	
1964	4.4	4.7	3.6	4.7	3.5	3.5	2.2	1.9	3.3	3.3	3.3	4.4	
1965	4.1	3.5	3.4	3.3	3.5	2.2	2.2	1.7	3.3	3.3	3.3	3.3	
1966	4.4	4.1	3.3	3.6	3.3	2.7	2.2	2.6	4.1	3.3	3.3	3.3	
1967	4.4	3.7	3.3	3.7	3.3	3.3	2.2	1.7	3.3	3.3	3.3	3.3	
1968	3.9	3.2	3.8	3.8	3.8	3.3	2.4	1.8	3.3	3.3	3.3	3.3	
1969	3.6	3.7	3.9	2.8	2.0	2.2	1.6	1.6	3.3	3.3	3.3	3.3	
1970	3.4	3.5	3.8	4.0	3.5	1.1	1.5	1.6	3.3	3.3	3.3	3.3	
1971	3.7	3.9	4.2	2.7	3.0	1.1	1.5	2.4	3.3	3.3	3.3	3.3	
1972	4.4	4.2	3.1	2.8	1.1	1.6	1.4	1.6	4.4	3.3	3.3	3.3	
1973	2.8	3.0	4.1	2.4	2.0	1.4	1.1	1.5	3.3	3.3	3.3	3.3	
1974	4.0	4.0	3.3	2.7	2.1	1.1	1.8	1.8	3.3	3.3	3.3	3.3	
1975	4.8	3.0	2.2	1.5	2.2	1.9	2.0	3.1	3.3	3.3	3.3	3.3	
1976	6.1	4.7	4.7	3.2	2.4	1.1	1.6	3.0	3.3	3.3	3.3	3.3	
1977	3.9	3.6	3.6	1.6	1.1	1.3	2.2	2.1	3.3	3.3	3.3	3.3	
1978	3.4	2.3	4.4	2.4	1.8	1.7	2.2	2.3	3.3	3.3	3.3	3.3	
1979	3.2	3.1	2.1	2.2	2.2	1.7	1.1	1.7	2.2	2.2	2.2	3.3	
1980	6.6	4.8	4.9	1.1	1.8	1.4	1.1	1.2	4.8	3.3	3.3	3.3	
1981	2.7	3.4	3.0	2.5	1.5	3.0	1.1	1.4	4.4	3.3	3.3	3.3	
1982	4.4	4.6	6.2	4.8	1.3	1.7	1.1	1.5	2.2	3.3	3.3	3.3	
1983	4.1	5.9	2.3	2.4	1.5	1.7	2.4	1.9	3.3	3.3	3.3	3.3	
1984	5.9	4.1	4.0	2.4	2.7	1.4	2.2	2.6	3.3	3.3	3.3	3.3	
1985	5.0	4.3	4.8	2.8	1.8	3.1	1.4	2.1	3.3	3.3	3.3	3.3	
1986	5.8	2.9	4.6	2.6	2.4	1.1	1.1	2.8	3.3	3.3	3.3	3.3	
1987	3.7	3.8	4.1	3.9	2.9	1.5	1.9	2.8	2.1	3.3	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S73

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	279.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	425	874	339	18	.	.	.	.	.	.	1656
0.50-0.99	.	1263	377	360	50	.	.	.	.	.	2050
1.00-1.49	.	.	264	165	187	22	.	.	.	.	638
1.50-1.99	.	.	104	11	73	50	.	.	.	.	238
2.00-2.49	.	.	8	2	7	14	1	.	.	.	32
2.50-2.99	2	2	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	425	2137	1092	556	317	88	3	0	0	0	4327.

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4327.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	397	887	209	9	.	.	.	.	.	.	1502
0.50-0.99	.	1896	367	158	38	.	.	.	.	.	2459
1.00-1.49	.	.	513	28	39	12	.	.	.	.	592
1.50-1.99	.	.	254	11	13	18	.	.	.	.	296
2.00-2.49	.	.	3	10	.	.	.	.	.	.	13
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	397	2783	1346	217	90	30	0	0	0	0	4557.

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4557.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	528	1167	122	8	.	.	.	.	.	.	1825
0.50-0.99	.	2407	485	37	20	1	.	.	.	.	2950
1.00-1.49	.	.	332	1	3	1	.	.	.	.	337
1.50-1.99	.	.	128	8	2	4	.	.	.	.	142
2.00-2.49	.	.	2	7	.	1	1	.	.	.	11
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	528	3574	1069	61	25	7	1	0	0	0	4930.

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4930.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	279	626	115	2	.	.	.	.	.	.	1022
0.50-0.99	.	1079	113	40	6	.	.	.	.	.	1238
1.00-1.49	.	.	124	6	19	2	.	.	.	.	151
1.50-1.99	.	.	35	3	16	5	.	.	.	.	59
2.00-2.49	.	.	1	.	.	2	.	.	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	279	1705	388	51	41	9	0	0	0	0	2317.

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2317.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 90.0										
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	300	611	87	7	5	.	.	.	.	1005
0.50-0.99	.	543	62	74	16	.	.	.	.	684
1.00-1.49	.	.	42	35	19	.	.	.	.	93
1.50-1.99	.	.	5	2	6	.	.	.	.	32
2.00-2.49	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	300	1154	196	118	40	12	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 1708.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =112.5										
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	193	311	49	2	.	.	.	.	.	555
0.50-0.99	.	298	155	25	.	.	.	.	.	478
1.00-1.49	.	.	51	27	1	.	.	.	.	79
1.50-1.99	.	.	5	27	11	3	.	.	.	46
2.00-2.49	.	.	.	7	2	2	.	.	.	11
2.50-2.99	.	.	.	1	3	1	.	.	.	5
3.00-3.49	1	.	.	.	1
3.50-3.99	1	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	193	609	260	89	17	7	1	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 1106.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =135.0										
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	171	303	296	65	3	.	.	.	.	838
0.50-0.99	.	403	494	291	103	1	.	.	.	1292
1.00-1.49	.	.	112	124	88	40	.	.	.	364
1.50-1.99	.	.	9	41	27	36	.	.	.	113
2.00-2.49	.	.	.	20	9	17	2	.	.	48
2.50-2.99	.	.	.	1	18	8	.	.	.	27
3.00-3.49	14	2	.	.	16
3.50-3.99	4	6	.	.	10
4.00-4.49	2	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	171	706	911	542	248	120	12	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 2545.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =157.5										
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	187	629	757	134	2	.	.	.	.	1709
0.50-0.99	.	457	1409	812	193	9	.	.	.	2880
1.00-1.49	.	1	288	250	250	104	.	.	.	893
1.50-1.99	.	.	22	139	69	73	.	.	.	308
2.00-2.49	.	.	.	52	23	43	.	.	.	122
2.50-2.99	.	.	.	2	2	12	.	.	.	45
3.00-3.49	2	25	.	.	.	31
3.50-3.99	10	.	.	.	12
4.00-4.49	3	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	187	1087	2476	1389	568	280	13	1	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 5628.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	247	983	442	8							1680
0.50-0.99		605	2252	419	4						3280
1.00-1.49			548	718	211	1					1478
1.50-1.99			47	293	250	59					649
2.00-2.49				128	98	82					308
2.50-2.99				7	100	48	6	1			162
3.00-3.49					5	95	3	1			104
3.50-3.99						32	12				44
4.00-4.49						1	17				18
4.50-4.99							1	1			2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	247	1588	3289	1573	668	318	39	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 7234.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	312	1051	614	9	1						1987
0.50-0.99		674	3287	957	12						4930
1.00-1.49			633	1373	466	3					2475
1.50-1.99			49	377	544	97	1				1068
2.00-2.49				142	156	212	1				511
2.50-2.99				4	139	111	20				274
3.00-3.49					14	154	19	7			194
3.50-3.99						86	25	4	1		116
4.00-4.49						7	48	13			68
4.50-4.99							16	16			32
5.00-5.49								9			9
5.50-5.99								1			1
6.00-6.49									1		1
6.50-6.99											1
7.00+											0
TOTAL	312	1725	4583	2862	1332	670	130	50	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 10922.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	333	1009	283	9	1						1635
0.50-0.99		663	2498	248	13						3422
1.00-1.49			634	782	102	9					1527
1.50-1.99			39	337	285	33					694
2.00-2.49				101	124	111	2				338
2.50-2.99				1	105	67	18				191
3.00-3.49					7	86	23	5			121
3.50-3.99						50	26	5			81
4.00-4.49						2	47	11	1		61
4.50-4.99							8	14			22
5.00-5.49								11			11
5.50-5.99								1	3		4
6.00-6.49									3		3
6.50-6.99											0
7.00+											0
TOTAL	333	1672	3454	1478	637	358	124	47	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 7600.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	294	1201	544	64	3						2106
0.50-0.99		689	3089	659	132	9					4578
1.00-1.49			756	1075	234	172	2				2239
1.50-1.99			48	405	321	180	42	6			1002
2.00-2.49				100	174	171	44	21			510
2.50-2.99				1	118	100	31	12	10		272
3.00-3.49					7	87	23	18	6		141
3.50-3.99						36	27	13	4		80
4.00-4.49							22	11	2		35
4.50-4.99								16	5		25
5.00-5.49								12	2	1	15
5.50-5.99								1	4		5
6.00-6.49									2		2
6.50-6.99											0
7.00+											1
TOTAL	294	1890	4437	2304	989	755	195	110	36	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 10317.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	293	1331	578	55	2						2259
0.50-0.99		689	3967	641	124	50					5471
1.00-1.49			788	1786	272	217	24				3089
1.50-1.99			47	474	596	168	77	39			1403
2.00-2.49				124	214	293	23	35	10		699
2.50-2.99				6	135	135	42	10	12		340
3.00-3.49					23	86	36	19			164
3.50-3.99						48	33	13	5		99
4.00-4.49						4	28	10	1		43
4.50-4.99							3	12	4	2	21
5.00-5.49								6		1	13
5.50-5.99								1	3		4
6.00-6.49											1
6.50-6.99											1
7.00+											1
TOTAL	293	2020	5380	3086	1366	1001	266	150	43	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 12747.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	205	1030	642	17	1						1895
0.50-0.99		639	2871	834	55	6					4405
1.00-1.49			651	998	408	59	3				2119
1.50-1.99			50	310	315	172	3				850
2.00-2.49				118	86	146	18	3			371
2.50-2.99				11	116	54	19	3			203
3.00-3.49					14	94	17	2			127
3.50-3.99						50	27	5			82
4.00-4.49						2	23	4			29
4.50-4.99							6	3			9
5.00-5.49								1			1
5.50-5.99								1	1		2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	205	1669	4214	2288	995	583	116	22	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.8 NO. OF CASES= 9454.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	141	417	416	10							984
0.50-0.99		580	1425	459	49						2513
1.00-1.49			426	524	214	33					1197
1.50-1.99			48	238	147	103	2				538
2.00-2.49				82	64	75	3	1			225
2.50-2.99				4	85	41	4				134
3.00-3.49					3	80					83
3.50-3.99						35	11				46
4.00-4.49						2	9				12
4.50-4.99							1	2			3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	141	997	2315	1317	562	369	30	4	0	0	

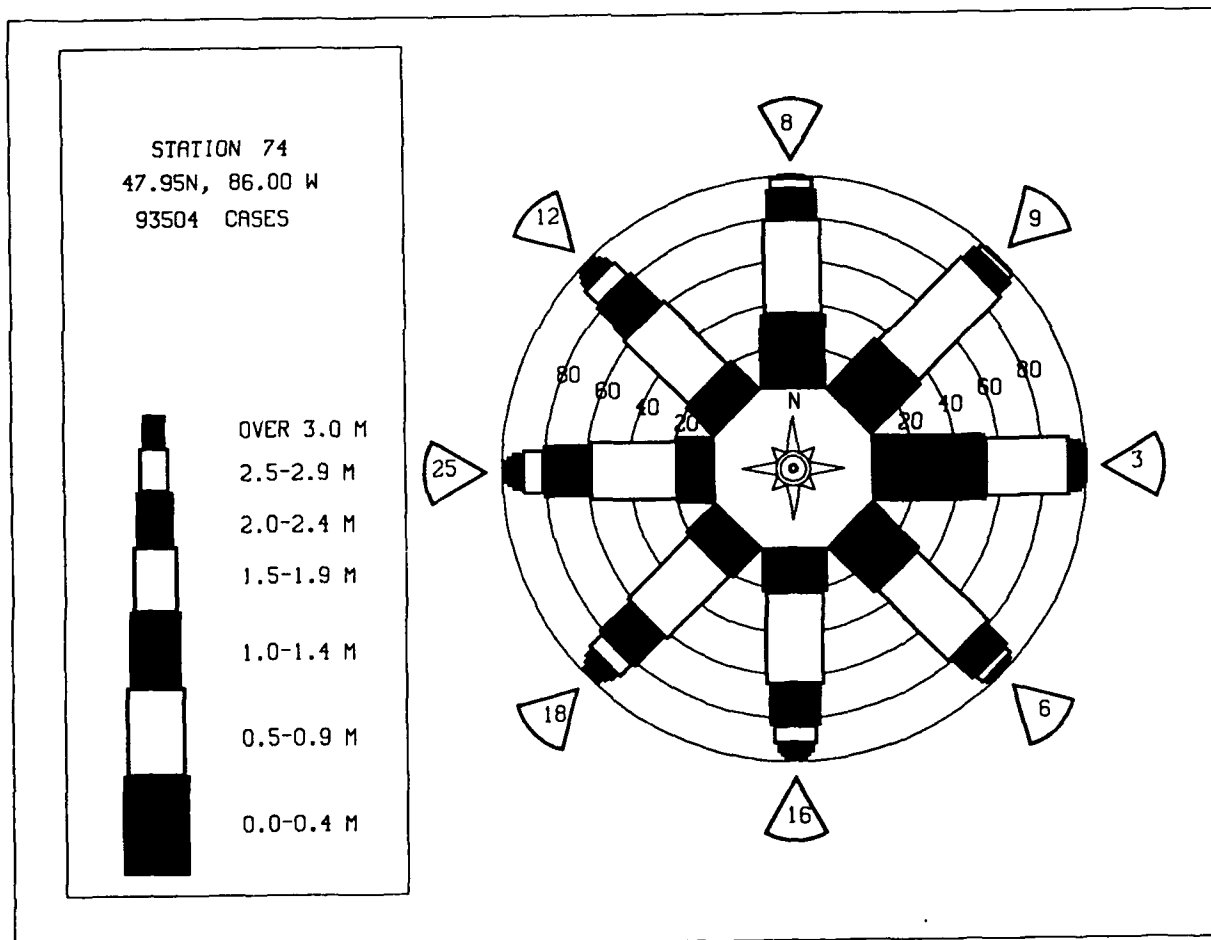
MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 5375.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	202	457	134	2							795
0.50-0.99		517	503	171	12						1203
1.00-1.49			159	218	105	8					490
1.50-1.99			35	88	72	40					235
2.00-2.49				41	14	29	2				86
2.50-2.99				2	35	17	4	1			59
3.00-3.49					2	22	3				27
3.50-3.99						8	4	2			14
4.00-4.49							4				4
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	202	974	831	522	240	124	17	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 2737.

STATION S74 47.95N 86.00W FOR ALL DIRECTIONS											TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	451	1289	563	42	1	7	.	.	.	.	2346
0.50-0.99	.	1340	2336	619	82	68	2	.	.	.	4384
1.00-1.49	.	.	632	811	262	105	12	.	.	.	1775
1.50-1.99	.	.	93	277	276	121	10	4	1	.	767
2.00-2.49	.	.	1	94	97	60	15	6	.	.	330
2.50-2.99	.	.	.	4	88	74	13	2	2	.	171
3.00-3.49	8	36	17	5	1	.	100
3.50-3.99	1	20	4	.	.	58
4.00-4.49	4	6	.	.	26
4.50-4.99	4	.	.	10
5.00-5.49	4
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	451	2629	3625	1847	814	472	93	36	5	0	
MEAN HS(M)= 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.											



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S74 (47.95N 86.00W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	1.0	0.8	0.7	0.6	0.5	0.4	0.5	0.6	1.0	0.8	0.7	0.7
1957	1.0	1.0	0.8	0.7	0.7	0.7	0.5	0.6	0.8	0.7	1.0	1.0	0.8
1958	0.6	0.8	0.4	0.7	0.7	0.7	0.5	0.5	0.7	0.7	1.3	0.9	0.7
1959	0.9	0.9	0.8	0.7	0.7	0.5	0.6	0.5	0.7	0.7	1.0	0.9	0.7
1960	0.8	0.7	0.6	0.7	0.5	0.5	0.5	0.6	0.6	0.8	1.1	1.0	0.7
1961	0.8	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.8	0.8	1.0	0.9	0.7
1962	1.1	0.7	0.5	0.6	0.6	0.5	0.5	0.5	0.7	0.7	1.0	1.1	0.7
1963	1.1	1.2	1.1	0.9	0.8	0.7	0.7	0.6	0.8	1.1	1.1	1.2	0.9
1964	1.4	1.3	1.1	1.1	1.0	0.8	0.6	0.9	1.0	1.2	1.1	1.1	1.1
1965	1.5	1.5	0.9	0.9	0.9	0.9	0.8	0.7	1.0	1.2	1.4	1.2	1.1
1966	1.2	1.5	1.4	0.9	1.0	0.8	0.8	0.7	1.2	1.5	1.3	1.3	1.1
1967	1.4	1.5	1.6	1.0	1.0	0.8	0.7	0.8	1.2	1.5	1.4	1.7	1.2
1968	1.3	1.6	1.5	1.1	0.9	0.7	0.9	0.8	0.9	1.4	1.3	1.3	1.1
1969	1.5	1.1	1.2	0.9	0.8	0.8	0.6	0.9	1.0	1.3	1.3	1.1	1.0
1970	1.2	1.5	1.2	1.1	0.8	0.7	0.6	0.7	1.1	1.4	1.2	1.1	1.0
1971	1.3	1.3	1.2	1.0	0.7	0.6	0.8	0.6	1.0	1.2	1.2	1.2	1.0
1972	1.5	1.2	1.0	0.8	0.5	0.6	0.6	0.6	1.0	1.3	1.0	1.0	0.9
1973	1.2	1.2	1.0	0.9	0.6	0.6	0.6	0.6	1.0	1.1	1.3	1.0	0.9
1974	1.1	0.9	1.2	0.8	0.7	0.7	0.6	0.8	1.0	1.2	1.2	1.1	0.9
1975	1.1	0.9	0.9	0.5	0.5	0.6	0.7	0.8	0.9	1.4	1.3	1.3	0.9
1976	1.5	1.4	0.8	0.8	0.6	0.6	0.4	0.6	0.8	1.2	1.2	2.2	0.9
1977	1.1	1.1	0.9	0.5	0.5	0.5	0.5	0.7	0.7	0.8	1.0	0.0	0.8
1978	1.0	0.7	0.9	0.7	0.5	0.5	0.5	1.1	0.8	1.2	1.3	0.0	0.9
1979	0.9	0.7	0.9	0.5	0.5	0.6	0.4	0.6	0.9	0.8	1.4	0.6	0.8
1980	1.1	0.8	0.9	0.6	0.5	0.5	0.4	0.6	1.0	1.2	1.0	1.1	0.8
1981	0.9	1.1	0.8	0.8	0.5	0.5	0.4	0.4	0.0	1.1	1.1	0.0	0.8
1982	1.4	1.1	0.0	0.8	0.5	0.5	0.5	0.5	0.8	1.2	1.3	1.1	1.0
1983	1.2	1.0	0.9	0.6	0.5	0.5	0.5	0.5	1.1	1.1	1.4	1.3	0.9
1984	1.4	1.1	0.7	0.6	0.6	0.6	0.5	0.5	1.1	1.3	1.7	1.1	1.0
1985	1.3	1.1	1.2	0.7	0.5	0.7	0.5	0.6	1.1	1.4	1.0	1.1	0.9
1986	1.3	0.7	1.3	0.9	0.5	0.6	0.4	0.6	0.9	1.0	1.6	1.1	0.9
1987	1.1	0.9	1.0	0.6	0.6	0.4	0.5	0.6	0.6	1.0	1.1	1.1	0.8
MEAN	1.1	1.1	1.0	0.8	0.7	0.6	0.6	0.6	0.9	1.1	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S74 (47.95N 86.00W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.2	2.6	2.4	1.8	1.8	1.2	1.2	1.8	3.2	2.2	2.6
1957	3.1	3.0	2.6	2.4	1.8	3.0	2.2	1.2	1.8	3.2	2.2	2.6
1958	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1959	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1960	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1961	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1962	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1963	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1964	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1965	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1966	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1967	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1968	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1969	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1970	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1971	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1972	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1973	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1974	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1975	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1976	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1977	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1978	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1979	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1980	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1981	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1982	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1983	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1984	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1985	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1986	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6
1987	2.4	2.2	2.6	2.4	1.8	2.2	1.2	1.2	1.8	3.2	2.2	2.6

32 YR. STATISTICS FOR WIS STATION S74

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	278.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	235	641	36	.	.	.	.	.	.	.	912
0.50-0.99	.	537	1863	27	.	.	.	.	.	.	2427
1.00-1.49	.	.	1411	105	18	.	.	.	.	.	1534
1.50-1.99	.	.	202	445	42	3	.	.	.	.	692
2.00-2.49	.	.	.	365	22	8	.	.	.	.	395
2.50-2.99	.	.	.	36	44	7	.	.	.	.	87
3.00-3.49	11	1	1	.	.	.	13
3.50-3.99	2	1	.	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	1178	3512	978	139	20	1	0	0	0	5680.

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 5680.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	225	814	44	.	.	.	.	.	.	.	1083
0.50-0.99	.	1194	1117	22	3	.	.	.	.	.	2336
1.00-1.49	.	.	750	33	2	2	.	.	.	.	787
1.50-1.99	.	.	145	178	2	1	.	.	.	.	326
2.00-2.49	.	.	2	139	2	2	.	.	.	.	143
2.50-2.99	.	.	.	4	18	2	.	.	.	.	24
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	225	2008	2058	376	32	5	0	0	0	0	4406.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 4406.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	425	1122	67	5	.	.	.	.	.	.	1619
0.50-0.99	.	2420	594	18	8	3	.	.	.	.	3043
1.00-1.49	.	.	351	16	4	2	.	.	.	.	373
1.50-1.99	.	.	141	12	6	1	1	.	.	.	160
2.00-2.49	.	.	2	8	1	1	1	.	.	.	13
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	425	3542	1155	59	13	12	2	0	0	0	4877.

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4877.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	220	705	91	1	.	.	.	.	.	.	1017
0.50-0.99	.	1167	160	10	8	.	.	.	.	.	1345
1.00-1.49	.	.	140	7	6	7	.	.	.	.	160
1.50-1.99	.	.	43	.	5	10	.	.	.	.	58
2.00-2.49	.	.	1	.	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	220	1872	435	18	19	17	0	0	0	0	2421.

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2421.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	265	727	66	3	5	.	.	.	.	.	1061
0.50-0.99	.	612	69	25	10	2	.	.	.	.	711
1.00-1.49	.	.	66	3	10	2	.	.	.	.	81
1.50-1.99	.	.	11	1	4	11	.	.	.	.	27
2.00-2.49	3	.	.	.	.	3
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	265	1338	212	32	19	16	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 1767.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	164	409	33	1	.	.	.	.	.	.	607
0.50-0.99	.	321	124	6	.	.	.	.	.	.	451
1.00-1.49	.	.	50	16	3	.	.	.	.	.	69
1.50-1.99	.	.	7	18	3	2	.	.	.	.	30
2.00-2.49	.	.	.	5	4	2	.	.	.	.	11
2.50-2.99	3	1	.	.	.	.	4
3.00-3.49	1	.	.	.	.	1
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	164	730	214	46	13	6	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 1103.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	185	341	201	66	5	.	.	.	.	.	798
0.50-0.99	.	478	371	172	105	7	.	.	.	.	1133
1.00-1.49	.	.	115	58	51	42	.	.	.	.	266
1.50-1.99	.	.	8	37	18	34	.	.	.	.	97
2.00-2.49	.	.	.	16	8	10	1	1	.	.	36
2.50-2.99	.	.	.	1	6	2	1	.	.	.	18
3.00-3.49	7	1	1	.	.	9
3.50-3.99	3	4	.	.	.	7
4.00-4.49	3	.	.	.	3
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	185	819	695	350	193	111	11	3	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 2223.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	226	653	704	173	9	.	.	.	.	.	1765
0.50-0.99	.	529	1245	664	314	32	.	.	.	.	2784
1.00-1.49	.	.	1	350	232	176	141	.	.	.	900
1.50-1.99	.	.	29	149	52	68	8	.	.	.	306
2.00-2.49	.	.	.	80	23	37	6	1	.	.	147
2.50-2.99	.	.	.	1	43	6	3	2	.	.	55
3.00-3.49	12	23	3	.	.	.	38
3.50-3.99	6	2	.	.	.	8
4.00-4.49	1	2	1	.	.	5
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	226	1183	2328	1299	629	314	26	6	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5635.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	316	1078	472	4	14	.	.	.	.	.	1870
0.50-0.99	.	662	2645	465	813	253	.	.	.	.	3786
1.00-1.49	.	.	604	813	253	6	.	.	.	.	1676
1.50-1.99	.	.	53	341	282	79	1	.	.	.	756
2.00-2.49	.	.	.	151	88	108	1	.	.	.	348
2.50-2.99	.	.	.	5	147	44	7	1	.	.	204
3.00-3.49	8	109	56	1	.	.	127
3.50-3.99	4	26	.	1	.	83
4.00-4.49	23	.	.	.	27
4.50-4.99	4	8	.	.	12
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	316	1740	3774	1779	792	406	71	11	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8327.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	298	1042	474	10	.	.	.	.	.	.	1824
0.50-0.99	.	595	3056	760	18	.	.	.	.	.	4429
1.00-1.49	.	.	623	1243	393	5	.	.	.	.	2264
1.50-1.99	.	.	50	375	457	99	.	.	.	.	981
2.00-2.49	.	.	1	145	124	199	4	.	.	.	473
2.50-2.99	.	.	.	4	133	93	24	2	.	.	256
3.00-3.49	16	129	24	10	.	.	179
3.50-3.99	71	40	9	.	.	120
4.00-4.49	10	59	12	1	.	82
4.50-4.99	4	23	.	.	27
5.00-5.49	11	1	.	12
5.50-5.99	1	.	1
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	298	1637	4204	2537	1141	606	155	67	4	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 9976.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	290	934	268	4	2	.	.	.	.	.	1498
0.50-0.99	.	566	2321	272	13	.	.	.	.	.	3172
1.00-1.49	.	.	647	757	120	5	.	.	.	.	1529
1.50-1.99	.	.	34	320	249	37	.	.	.	.	640
2.00-2.49	.	.	.	95	126	96	2	.	.	.	319
2.50-2.99	.	.	.	1	111	53	9	1	.	.	175
3.00-3.49	5	83	27	5	.	.	120
3.50-3.99	51	27	6	1	.	85
4.00-4.49	3	40	13	2	.	58
4.50-4.99	6	20	.	.	26
5.00-5.49	9	.	.	9
5.50-5.99	2	3	.	5
6.00-6.49	3	1	4
6.50-6.99	1	.	1
7.00+	0
TOTAL	290	1500	3270	1449	626	328	111	56	10	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 7162.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	239	1083	507	57	180	8	.	.	.	.	1886
0.50-0.99	.	670	2844	756	180	8	.	.	.	.	4458
1.00-1.49	.	.	782	970	319	209	1	.	.	.	2281
1.50-1.99	.	.	42	426	320	222	44	3	.	.	1057
2.00-2.49	.	.	1	114	155	160	59	33	1	.	523
2.50-2.99	.	.	.	4	132	125	25	29	8	.	323
3.00-3.49	12	93	23	19	11	.	158
3.50-3.99	43	29	16	3	1	92
4.00-4.49	4	22	14	3	.	43
4.50-4.99	5	16	.	.	21
5.00-5.49	14	4	1	19
5.50-5.99	2	5	.	7
6.00-6.49	2	.	2
6.50-6.99	1	1
7.00+	1
TOTAL	239	1753	4176	2327	1118	864	208	146	37	4	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 10190.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	258	1195	222	19	1						1695
0.50-0.99		649	3561	352	94	23					4679
1.00-1.49			898	1451	151	221	5				2726
1.50-1.99			50	550	444	137	71	23			1275
2.00-2.49				128	235	231	37	54	5		690
2.50-2.99				5	154	172	25	18	17		391
3.00-3.49					13	112	29	13	7	2	176
3.50-3.99					1	56	31	9	3	1	101
4.00-4.49						5	31	8	2	1	47
4.50-4.99							6	12		1	19
5.00-5.49								9		1	10
5.50-5.99								2	6	1	9
6.00-6.49								1			1
6.50-6.99											0
7.00+											0
TOTAL	258	1844	4731	2505	1093	957	235	149	40	7	11073

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 11073.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	126	1029	197	4							1356
0.50-0.99		549	3167	260	19	2					3997
1.00-1.49			746	1252	108	24					2130
1.50-1.99			57	417	397	44	7	3			925
2.00-2.49				119	164	168	1				452
2.50-2.99				9	132	110	7	5			263
3.00-3.49					14	118	12				144
3.50-3.99						64	19	2			85
4.00-4.49						5	19	3		1	30
4.50-4.99							3	2			5
5.00-5.49								2	1		3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											1
TOTAL	126	1578	4167	2061	834	535	68	19	2	1	8799

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8799.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	108	577	112								797
0.50-0.99		362	2238	80							2680
1.00-1.49			662	823	56	2					1543
1.50-1.99			49	407	237	12					705
2.00-2.49				115	130	80					325
2.50-2.99				5	129	62	2				198
3.00-3.49					11	117	2				130
3.50-3.99						26	1				26
4.00-4.49						1	5				6
4.50-4.99							3				4
5.00-5.49							1	1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	108	939	3061	1430	563	300	13	1	0	0	6008

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 6008.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

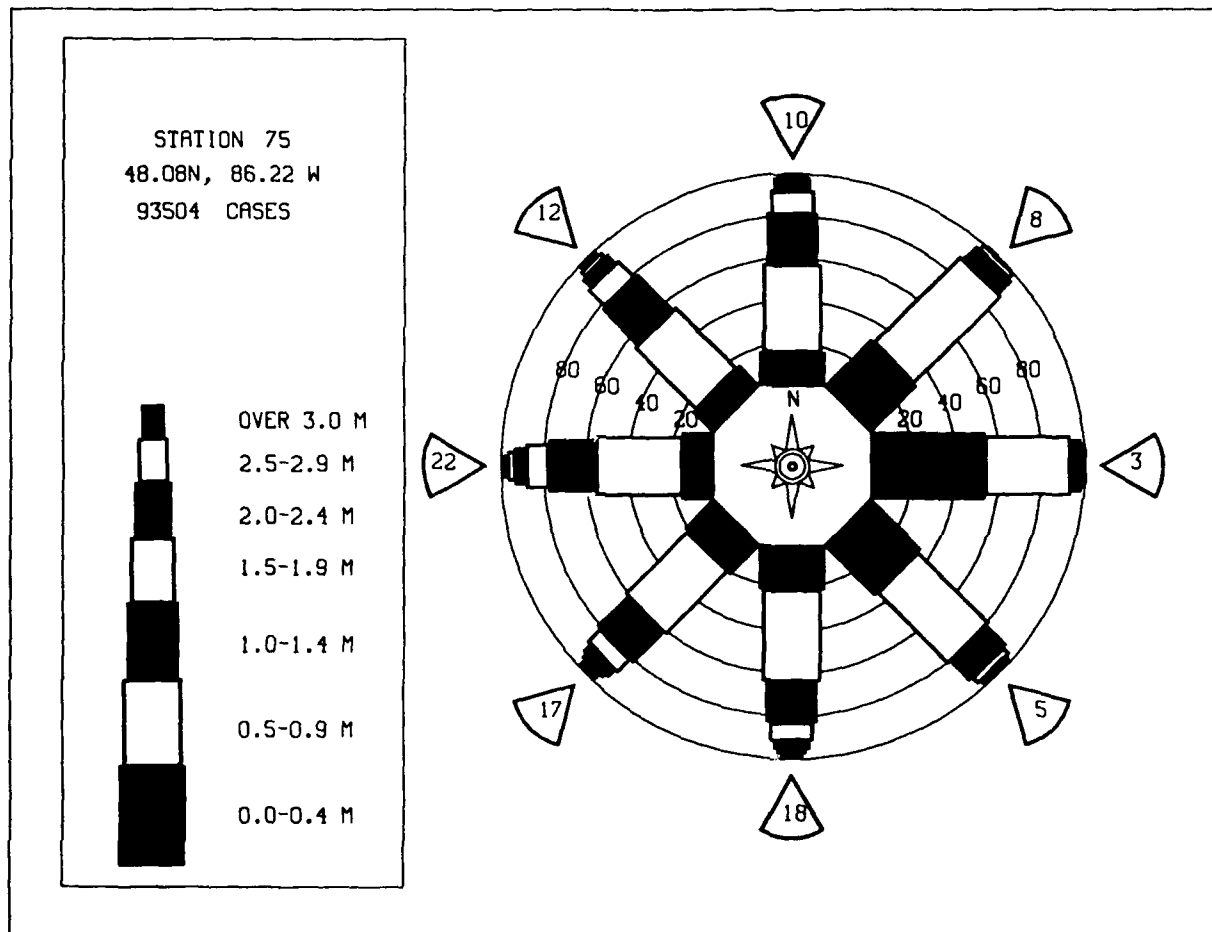
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	124	388	20								532
0.50-0.99		259	1269	18							1546
1.00-1.49			640	392	6						1038
1.50-1.99			73	320	141	1					535
2.00-2.49				124	90	32					246
2.50-2.99				20	86	31					137
3.00-3.49					5	51					56
3.50-3.99					1	19	1				21
4.00-4.49						2	3				5
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	124	647	2002	874	329	136	4	0	0	0	3857

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 3857.

STATION S75 48.08N 86.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	371	1274	352	35	1						2033
0.50-0.99		1157	2665	391	78	7					4298
1.00-1.49			884	817	168	67					1936
1.50-1.99			100	400	265	77	13	2			857
2.00-2.49				160	117	114	11	8			410
2.50-2.99				9	114	71	10	6	2		212
3.00-3.49					11	84	13	5	1		114
3.50-3.99						40	18	4			62
4.00-4.49						3	21	5			29
4.50-4.99							3	4			11
5.00-5.49									1		4
5.50-5.99											1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	371	2431	4001	1812	754	463	89	42	4	0	93504

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S75 (48.08N 86.22W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	1.0	0.8	0.7	0.6	0.6	0.5	0.5	0.6	1.0	0.8	0.8	0.7
1957	1.1	1.1	0.8	0.8	0.7	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1958	0.7	1.0	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1959	0.7	1.0	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1960	0.7	1.0	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1961	0.7	1.0	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1962	0.7	1.0	0.8	0.7	0.8	0.7	0.5	0.5	0.6	0.7	1.0	1.0	0.8
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.2	1.1	1.1	0.8	0.7	0.7	0.6	0.7	0.9	1.2	1.3	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S75 (48.08N 86.22W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.1	3.1	2.6	2.5	1.8	1.9	1.2	1.2	1.8	3.3	2.1	2.8	
1957	3.1	3.0	2.6	2.1	2.6	3.0	1.9	1.6	2.2	1.7	2.6	3.7	
1958	2.5	2.6	1.4	4.3	2.4	2.3	1.6	1.6	2.2	2.6	7.4	2.9	
1959	4.2	5.2	2.7	2.2	3.5	1.9	1.8	1.7	2.1	2.6	3.3	3.6	
1960	2.3	2.1	1.9	2.7	1.3	1.5	1.6	2.7	1.8	3.0	3.2	3.7	
1961	2.4	2.6	3.2	2.4	1.9	2.2	1.3	2.3	2.0	2.3	4.5	2.8	
1962	2.8	2.4	2.1	2.1	1.6	1.5	1.4	1.2	2.3	3.7	3.1	4.6	
1963	2.8	3.6	3.1	3.4	2.5	2.8	2.6	1.2	2.4	4.3	3.6	4.0	
1964	5.2	4.4	4.7	4.7	3.3	2.4	1.8	3.0	4.7	4.9	4.9	3.6	
1965	3.9	3.8	3.2	3.2	2.9	3.2	1.8	2.0	3.2	3.8	5.0	3.6	
1966	4.3	4.4	4.5	3.6	2.8	2.8	3.0	2.6	3.5	5.3	4.4	4.4	
1967	4.0	4.3	4.3	4.0	3.3	2.6	2.3	2.1	3.3	4.7	3.9	5.1	
1968	4.7	4.7	4.8	3.8	3.0	2.4	3.0	2.5	3.2	4.3	4.4	4.1	
1969	3.9	3.8	3.9	2.9	2.2	2.5	1.7	2.7	3.8	5.3	4.3	3.5	
1970	3.7	4.6	3.7	3.9	2.7	2.3	2.1	2.0	3.8	5.7	4.7	4.0	
1971	3.7	4.4	3.5	2.9	3.2	1.8	2.4	1.8	4.2	4.7	5.1	5.0	
1972	4.0	4.7	3.3	3.0	1.5	2.3	1.8	1.9	4.3	4.6	4.4	3.3	
1973	2.8	3.7	4.4	2.6	1.8	1.4	1.9	1.9	3.3	3.6	4.1	5.3	
1974	4.5	3.8	3.5	2.8	2.1	2.0	1.7	2.6	2.8	3.9	3.5	3.9	
1975	4.3	2.8	2.2	1.8	2.5	2.0	2.0	3.5	2.7	5.4	4.9	3.9	
1976	5.2	4.4	4.1	3.5	3.0	2.1	1.2	2.6	3.4	3.7	4.5	5.0	
1977	4.4	3.9	4.0	1.8	1.7	1.4	2.3	2.2	5.5	4.1	7.2	3.0	
1978	3.2	2.1	3.9	2.7	1.9	1.6	1.7	2.8	2.8	4.2	4.3	4.3	
1979	3.3	2.9	2.7	2.4	2.9	2.5	1.4	2.4	2.3	2.8	5.3	4.2	
1980	5.9	3.9	4.4	1.8	1.6	1.4	1.2	2.2	5.8	4.4	4.0	4.4	
1981	2.7	3.0	3.0	2.5	1.3	2.5	1.0	1.2	5.1	4.9	5.2	4.7	
1982	5.1	4.1	6.6	5.0	2.5	2.3	1.4	1.5	2.7	5.2	6.6	4.8	
1983	4.3	6.1	3.0	2.4	1.6	1.5	2.5	2.1	3.6	3.9	5.1	4.0	
1984	5.2	2.9	3.8	3.3	2.2	3.1	1.4	2.7	3.9	5.9	5.9	6.4	
1985	4.7	4.0	4.5	3.1	1.6	3.4	1.5	2.5	5.4	4.4	3.4	5.2	
1986	5.1	2.1	4.7	2.8	2.2	1.8	1.1	2.6	3.5	5.1	6.4	4.5	
1987	3.5	3.8	3.5	3.7	2.9	1.3	2.0	2.3	2.1	3.2	4.1	4.4	

32 YR. STATISTICS FOR WIS STATION S75

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	283.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58112906

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	243	322	29	31	.	.	.	.	.	.	594
0.50-0.99	.	1303	1440	164	3	.	.	.	.	.	2774
1.00-1.49	.	.	789	195	21	.	.	.	.	.	956
1.50-1.99	.	.	351	140	23	.	.	.	.	.	567
2.00-2.49	.	.	.	14	1	2	.	.	.	.	165
2.50-2.99	19
3.00-3.49	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	243	1625	2609	546	53	2	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4757.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	249	686	35	18	1	1	.	.	.	.	970
0.50-0.99	.	1598	1002	17	2	.	.	.	.	.	2620
1.00-1.49	.	.	719	17	1	.	.	.	.	.	738
1.50-1.99	.	.	252	164	2	.	.	.	.	.	417
2.00-2.49	.	.	.	73	1	.	.	.	.	.	75
2.50-2.99	.	.	.	5	1	.	.	.	.	.	6
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	249	2284	2008	277	8	1	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 4519.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	436	1027	35	1	2	.	.	.	.	.	1499
0.50-0.99	.	2515	546	8	2	.	.	.	.	.	3071
1.00-1.49	.	.	337	7	.	.	.	.	.	.	344
1.50-1.99	.	.	146	16	1	.	.	.	.	.	163
2.00-2.49	.	.	1	5	.	1	.	.	.	.	7
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	436	3542	1065	37	3	1	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4759.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	236	690	44	.	.	.	.	.	.	.	970
0.50-0.99	.	1219	165	2	1	1	.	.	.	.	1388
1.00-1.49	.	.	181	.	2	1	.	.	.	.	184
1.50-1.99	.	.	49	.	.	.	.	.	.	.	49
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	236	1909	439	2	3	2	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 2427.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	287	690	21	1	.	.	.	.	.	.	999
0.50-0.99	.	709	45	1	.	.	.	.	.	.	755
1.00-1.49	.	.	101	.	.	3	.	.	.	.	104
1.50-1.99	.	.	19	.	.	.	.	.	.	.	19
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	287	1399	186	2	0	3	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 1759.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	175	420	12	.	.	.	.	.	.	.	607
0.50-0.99	.	387	23	1	.	.	.	.	.	.	411
1.00-1.49	.	.	40	.	.	.	.	.	.	.	40
1.50-1.99	.	.	5	.	1	.	.	.	.	.	6
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	175	807	80	1	1	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 998.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	211	322	58	31	6	.	.	.	.	.	628
0.50-0.99	.	590	65	23	53	25	.	.	.	.	756
1.00-1.49	.	.	51	11	3	18	1	.	.	.	84
1.50-1.99	.	.	12	5	4	6	3	1	.	.	31
2.00-2.49	.	.	.	1	.	3	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	211	912	186	71	66	52	4	1	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 1414.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	265	657	443	313	53	.	.	.	.	.	1731
0.50-0.99	.	928	563	283	300	117	.	.	.	.	2191
1.00-1.49	.	.	118	135	64	106	7	.	.	.	430
1.50-1.99	.	.	37	49	22	33	8	2	.	.	151
2.00-2.49	.	.	.	19	16	13	12	4	.	.	64
2.50-2.99	11	4	4	2	.	.	21
3.00-3.49	6	5	.	2	.	.	13
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	265	1585	1161	799	472	280	31	10	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4318.

MEAN HS(M) = 0.9 LARGEST HS(M) = 5.5 MEAN TP(SEC) = 4.6 NO. OF CASES = 8794.

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 10326.

MEAN HS(M) = 1.0 LARGEST HS(M) = 7.0 MEAN TP(SEC) = 4.6 NO. OF CASES = 7590.

MEAN HS(M) = 1.1 LARGEST HS(M) = 6.9 MEAN TP(SEC) = 4.9 NO. OF CASES = 10740.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	239	1247	683	14	1	.	.	.	.	.	2184
0.50-0.99	.	725	4523	725	56	26	.	.	.	.	6055
1.00-1.49	.	.	962	2413	131	88	4	.	.	.	3598
1.50-1.99	.	.	54	667	697	91	35	19	1	.	1564
2.00-2.49	.	.	.	155	319	218	14	37	4	.	747
2.50-2.99	.	.	.	5	170	182	9	20	8	.	394
3.00-3.49	18	144	23	6	10	2	203
3.50-3.99	52	31	6	2	1	92
4.00-4.49	2	28	9	1	1	41
4.50-4.99	9	11	1	1	22
5.00-5.49	5	1	1	6
5.50-5.99	2	3	2	7
6.00-6.49	1	1	.	2
6.50-6.99	0
7.00+	0
TOTAL	239	1972	6222	3979	1392	803	153	116	30	9	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 13968.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	140	987	312	2	.	.	.	.	.	.	1441
0.50-0.99	.	700	2860	298	10	1	.	.	.	.	3869
1.00-1.49	.	.	774	1130	111	22	.	.	.	.	2037
1.50-1.99	.	.	51	485	355	23	2	3	.	.	919
2.00-2.49	.	.	1	147	216	91	3	2	.	.	460
2.50-2.99	.	.	.	9	162	69	3	.	.	.	243
3.00-3.49	24	97	8	.	1	.	130
3.50-3.99	43	19	2	.	.	64
4.00-4.49	2	16	2	.	.	20
4.50-4.99	3	4	.	.	7
5.00-5.49	2	.	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	1
TOTAL	140	1687	3998	2071	878	348	54	15	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 8610.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	110	419	80	.	.	.	.	.	.	.	619
0.50-0.99	.	470	1869	80	.	.	.	.	.	.	2419
1.00-1.49	.	.	687	652	44	1	.	.	.	.	1384
1.50-1.99	.	.	56	439	133	2	.	.	.	.	630
2.00-2.49	.	.	1	159	133	17	.	.	.	.	310
2.50-2.99	.	.	.	6	182	9	.	.	.	.	197
3.00-3.49	7	54	1	.	.	.	62
3.50-3.99	11	.	.	.	.	11
4.00-4.49	3	1	.	.	.	4
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	110	889	2703	1336	499	97	2	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.6 NO. OF CASES= 5281.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	103	231	16	.	.	.	.	.	.	.	350
0.50-0.99	.	553	1013	13	.	.	.	.	.	.	1579
1.00-1.49	.	.	490	284	.	.	.	.	.	.	784
1.50-1.99	.	.	116	260	52	.	.	.	.	.	428
2.00-2.49	.	.	2	105	80	3	.	.	.	.	190
2.50-2.99	.	.	.	5	80	6	.	.	.	.	91
3.00-3.49	6	22	1	.	.	.	29
3.50-3.99	6	.	.	.	.	5
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	103	784	1637	677	218	38	2	0	0	0	

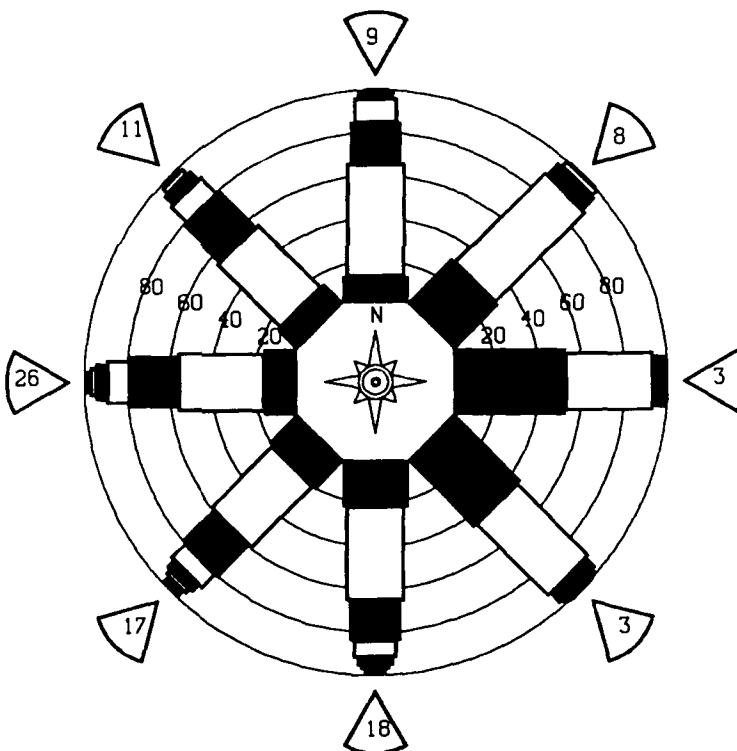
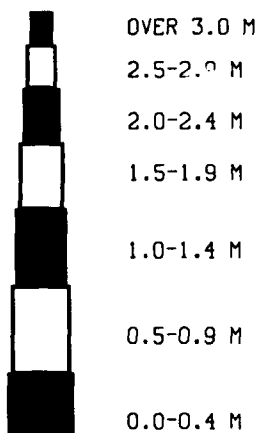
MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 3244.

STATION S76 48.23N 86.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	383	1180	381	46	6						1996
0.50-0.99		1451	2547	365	63	18					4444
1.00-1.49			816	886	143	42	1				1888
1.50-1.99			138	398	256	59	8	2			861
2.00-2.49				137	139	88	9	7			380
2.50-2.99				5	113	62	12	5	1		194
3.00-3.49					11	74	16	4	2		103
3.50-3.99						35	20	4			55
4.00-4.49						3	4	5			28
4.50-4.99							4	5			1
5.00-5.49								1			1
5.50-5.99								1	1		2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	383	2631	3882	1837	731	381	78	41	4	0	93504

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.

STATION 76
48.23N, 86.22 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S76 (48.23N 86.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	1.0	0.8	0.7	0.6	0.6	0.5	0.5	0.6	1.0	0.8	0.8	0.7
1957	1.0	1.1	0.8	0.7	0.7	0.7	0.6	0.6	0.8	0.7	1.0	1.0	0.8
1958	0.7	0.9	0.5	0.7	0.8	0.7	0.6	0.6	0.7	0.8	1.3	1.0	0.8
1959	1.0	1.0	0.8	0.7	0.8	0.5	0.7	0.5	0.7	0.7	1.0	0.9	0.8
1960	0.8	0.8	0.7	0.7	0.5	0.6	0.6	0.6	0.7	0.8	1.1	1.1	0.7
1961	0.8	0.7	0.8	0.6	0.7	0.6	0.4	0.6	0.8	0.8	1.1	0.9	0.7
1962	1.2	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.7	0.8	1.1	1.2	0.7
1963	1.2	1.2	1.2	1.0	0.9	0.7	0.8	0.6	0.9	1.2	1.1	1.3	1.0
1964	1.4	1.4	1.2	1.0	1.0	0.9	0.7	1.0	1.1	1.3	1.1	1.1	1.1
1965	1.5	1.6	1.0	0.9	0.9	0.9	0.9	0.7	1.0	1.2	1.4	1.3	1.1
1966	1.3	1.6	1.4	1.0	1.1	0.9	0.9	0.8	1.3	1.5	1.4	1.4	1.2
1967	1.4	1.6	1.7	1.1	1.1	0.9	0.8	0.9	1.3	1.6	1.6	1.7	1.3
1968	1.3	1.7	1.6	1.2	0.9	0.8	1.0	0.9	1.0	1.4	1.4	1.4	1.2
1969	1.5	1.2	1.3	0.9	0.9	0.9	0.7	1.0	1.1	1.4	1.4	1.1	1.1
1970	1.2	1.5	1.2	1.1	0.9	0.8	0.7	0.7	1.2	1.4	1.3	1.0	1.1
1971	1.3	1.3	1.2	1.0	0.8	0.7	0.9	0.7	1.0	1.3	1.3	1.2	1.1
1972	1.5	1.2	1.1	0.8	0.6	0.7	0.6	0.6	1.1	1.4	1.1	1.0	1.0
1973	1.3	1.2	1.1	0.9	0.7	0.6	0.7	0.6	1.0	1.1	1.3	1.0	1.0
1974	1.1	1.0	1.2	0.9	0.7	0.8	0.7	0.9	1.1	1.3	1.3	1.1	1.0
1975	1.2	1.0	1.0	0.6	0.6	0.7	0.8	0.9	1.0	1.5	1.4	1.3	1.1
1976	1.3	1.3	1.3	0.8	0.6	0.6	0.4	0.6	0.8	0.8	1.3	1.2	0.9
1977	1.2	1.1	0.9	0.5	0.5	0.5	0.5	0.7	0.7	0.8	1.0	1.0	0.8
1978	1.1	0.8	0.9	0.7	0.5	0.5	0.5	0.9	0.8	1.1	1.2	1.4	0.9
1979	1.0	0.7	0.9	0.5	0.6	0.7	0.4	0.7	1.0	1.0	1.6	1.4	0.9
1980	1.0	0.8	1.1	0.6	0.6	0.6	0.5	0.7	1.3	1.5	1.2	1.2	0.9
1981	0.9	1.0	0.8	0.7	0.6	0.6	0.4	0.4	1.0	1.3	1.3	1.0	0.8
1982	1.4	1.2	1.3	0.9	0.6	0.6	0.5	0.5	0.9	1.4	1.6	1.3	1.0
1983	1.1	1.0	0.9	0.6	0.6	0.6	0.5	0.5	1.2	1.3	1.6	1.3	0.9
1984	1.3	1.0	1.0	0.7	0.7	0.7	0.5	0.5	1.2	1.5	1.9	1.5	1.0
1985	1.2	1.1	1.2	0.7	0.6	0.8	0.5	0.7	1.3	1.7	1.2	1.4	1.0
1986	1.3	0.7	1.2	0.9	0.6	0.6	0.5	0.7	1.0	1.2	1.7	1.5	1.0
1987	1.1	0.9	0.9	0.6	0.5	0.4	0.5	0.6	0.6	1.0	1.0	1.1	0.8
MEAN	1.2	1.1	1.0	0.8	0.7	0.7	0.6	0.7	1.0	1.2	1.3	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S76 (48.23N 86.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	2.8	3.0	2.4	1.9	1.9	1.2	1.2	1.7	3.2	2.2	3.0	
1957	2.2	3.0	3.3	2.7	2.7	2.3	1.9	1.6	2.1	1.7	2.2	3.3	
1958	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1959	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1960	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1961	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1962	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1963	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1964	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1965	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1966	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1967	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1968	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1969	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1970	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1971	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1972	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1973	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1974	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1975	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1976	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1977	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1978	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1979	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1980	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1981	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1982	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1983	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1984	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1985	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1986	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	
1987	2.2	3.3	3.3	2.7	2.3	2.3	1.6	1.1	2.2	2.2	3.3	3.3	

32 YR. STATISTICS FOR WIS STATION S76

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	283.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	223	637	12	5	1	.	.	.	.	.	872
0.50-0.99	.	596	1761	17	.	.	.	.	.	.	2363
1.00-1.49	.	.	1566	510	4	.	.	.	.	.	1583
1.50-1.99	.	.	110	351	3	1	.	.	.	.	624
2.00-2.49	.	.	.	19	41	1	.	.	.	.	355
2.50-2.99	11	.	.	.	.	.	61
3.00-3.49	2	.	.	.	.	11
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	223	1233	3449	902	60	4	0	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5497.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	207	702	7	1	.	.	.	.	.	.	917
0.50-0.99	.	1113	967	12	.	.	.	.	.	.	2080
1.00-1.49	.	.	705	154	.	.	.	.	.	.	717
1.50-1.99	.	.	127	111	.	.	.	.	.	.	281
2.00-2.49	.	.	.	7	12	.	.	.	.	.	111
2.50-2.99	19
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	207	1815	1806	285	12	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3863.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	425	1103	17	1	2	.	.	.	.	.	1546
0.50-0.99	.	2397	560	4	2	.	.	.	.	.	2959
1.00-1.49	.	.	452	17	1	.	1	.	.	.	456
1.50-1.99	.	.	158	4	2	.	.	.	.	.	177
2.00-2.49	.	.	2	.	.	.	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	425	3500	1189	26	5	0	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4816.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	209	457	20	2	2	.	.	.	.	.	686
0.50-0.99	.	1667	532	1	.	4	.	.	.	.	2203
1.00-1.49	.	.	355	28	.	.	.	.	.	.	360
1.50-1.99	.	.	131	17	1	.	.	.	.	.	159
2.00-2.49	18
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	209	2124	1038	48	3	4	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3208.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	226	283	13	.	.	.	.	.	.	.	522
0.50-0.99	.	885	575	.	.	.	.	.	.	.	1460
1.00-1.49	.	.	227	1	1	3	.	.	.	.	232
1.50-1.99	.	.	57	42	.	1	.	.	.	.	100
2.00-2.49	.	.	.	11	.	.	.	1	.	.	12
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	226	1168	872	54	1	4	0	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 2181.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	170	224	4	.	.	.	.	.	.	.	398
0.50-0.99	.	490	366	.	.	.	.	.	.	.	856
1.00-1.49	.	.	129	.	1	.	.	.	.	.	130
1.50-1.99	.	.	34	27	.	.	.	.	.	.	61
2.00-2.49	.	.	.	7	.	1	.	.	.	.	8
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	170	714	533	34	1	1	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 1363.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	203	358	45	12	4	.	.	.	.	.	622
0.50-0.99	.	416	442	21	55	12	.	.	.	.	946
1.00-1.49	.	.	217	4	7	24	1	.	.	.	253
1.50-1.99	.	.	29	23	5	11	3	.	.	.	71
2.00-2.49	.	.	.	18	3	4	.	1	.	.	26
2.50-2.99	.	.	.	2	.	2	2	1	.	.	7
3.00-3.49	1	1	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	203	774	733	80	75	54	6	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 1812.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	268	767	484	236	43	.	.	.	.	.	1798
0.50-0.99	.	644	1491	356	270	90	.	.	.	.	2851
1.00-1.49	.	.	548	155	86	100	.	.	.	.	895
1.50-1.99	.	.	74	189	49	39	.	.	.	.	360
2.00-2.49	.	.	.	99	50	23	.	.	.	.	185
2.50-2.99	.	.	.	17	63	22	.	6	.	.	112
3.00-3.49	13	39	.	4	.	.	62
3.50-3.99	4	21	.	1	.	.	25
4.00-4.49	16	.	.	.	.	23
4.50-4.99	6	.	.	.	11
5.00-5.49	9	2	.	.	9
5.50-5.99	2	3	.	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	268	1411	2597	1052	578	350	51	27	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 5941.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	330	1023	689	4	1						2047
0.50-0.99		672	3114	1107	35	3					4931
1.00-1.49			688	1151	536	24					2399
1.50-1.99			64	356	405	152					977
2.00-2.49				149	121	149	5				424
2.50-2.99				6	136	69	33	4			248
3.00-3.49					16	108	12	13			149
3.50-3.99						57	25	6			88
4.00-4.49						6	38	4	2		50
4.50-4.99							7	20	2		29
5.00-5.49								8	3		11
5.50-5.99								1	1		2
6.00-6.49									3		3
6.50-6.99									2		2
7.00+											0
TOTAL	330	1695	4555	2773	1250	568	120	56	13	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10642.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	293	924	349	11							1577
0.50-0.99		632	2319	536	24						3511
1.00-1.49			634	891	243	18					1786
1.50-1.99			54	350	335	111	3				853
2.00-2.49				135	116	164	9				424
2.50-2.99				2	139	78	38	4			261
3.00-3.49					13	112	24	10			159
3.50-3.99						72	35	11			118
4.00-4.49						4	49	14	2		69
4.50-4.99							9	26	1		36
5.00-5.49								14	1		15
5.50-5.99								2	4		6
6.00-6.49									3		3
6.50-6.99									1		1
7.00+											0
TOTAL	293	1556	3356	1925	870	559	167	81	12	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 8266.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	291	1010	315	27	1						1644
0.50-0.99		650	2451	453	84	7					3645
1.00-1.49		1	747	811	194	68					1821
1.50-1.99			51	340	270	73	6				740
2.00-2.49				112	106	99	2	1			320
2.50-2.99				2	109	66	18	1			196
3.00-3.49					9	98	21	6	2		136
3.50-3.99						57	24	3	2		86
4.00-4.49						1	38	7	1		47
4.50-4.99							10	10			20
5.00-5.49							1	11	2		14
5.50-5.99								4			4
6.00-6.49									3		3
6.50-6.99									1		1
7.00+											0
TOTAL	291	1661	3564	1745	773	469	120	43	11	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 8132.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	252	1289	371	67	3						1982
0.50-0.99		819	3279	387	179	71					4735
1.00-1.49			901	1124	124	232	16	1			2398
1.50-1.99			45	524	308	94	71	27			1069
2.00-2.49				127	221	140	21	22	3		534
2.50-2.99				1	159	117	13	11			308
3.00-3.49					10	152	25	7	6	1	203
3.50-3.99						62	31	6	1		100
4.00-4.49							54	23			77
4.50-4.99							10	19	6		35
5.00-5.49								21	6		27
5.50-5.99								3	5		8
6.00-6.49									6		6
6.50-6.99									2		2
7.00+											1
TOTAL	252	2108	4596	2230	1004	868	241	140	44	2	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 10758.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	255	1276	132	2	28	28	.	.	.	.	1665
0.50-0.99	.	853	3705	191	28	28	.	.	.	.	4805
1.00-1.49	.	.	1001	1569	47	67	9	3	.	.	2696
1.50-1.99	.	.	56	658	445	26	17	21	2	.	1225
2.00-2.49	.	.	1	150	308	159	2	19	6	.	645
2.50-2.99	.	.	.	3	187	146	8	2	6	1	353
3.00-3.49	12	149	24	2	.	.	187
3.50-3.99	56	35	4	.	2	97
4.00-4.49	2	38	2	1	.	43
4.50-4.99	4	12	.	.	16
5.00-5.49	1	7	1	.	9
5.50-5.99	1	3	1	5
6.00-6.49	1	2	1	4
6.50-6.99	1	.	0
7.00+	1	.	1
TOTAL	255	2129	4895	2573	1027	633	138	74	22	5	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 11009.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	145	895	65	126	2	.	.	.	.	.	1105
0.50-0.99	.	635	2637	128	20	.	.	.	.	.	3400
1.00-1.49	.	.	1042	728	10	10	.	1	.	.	1801
1.50-1.99	.	.	66	625	158	4	2	.	.	.	855
2.00-2.49	.	.	.	209	148	27	1	3	.	.	388
2.50-2.99	.	.	.	9	156	42	1	.	.	.	208
3.00-3.49	22	55	1	.	.	.	78
3.50-3.99	1	29	11	.	.	.	41
4.00-4.49	1	10	1	.	.	12
4.50-4.99	1	.	.	.	1
5.00-5.49	1	1	.	2
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	145	1530	3810	1697	507	168	27	6	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 7392.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	110	480	16	23	.	.	.	.	.	.	606
0.50-0.99	.	356	1869	265	4	.	.	.	.	.	2248
1.00-1.49	.	.	901	251	33	.	.	.	.	.	1170
1.50-1.99	.	.	43	237	72	6	.	.	.	.	597
2.00-2.49	.	.	.	3	122	5	.	.	.	.	315
2.50-2.99	27	3	.	.	.	.	130
3.00-3.49	4	.	.	.	.	30
3.50-3.99	4
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	110	836	2829	1049	258	18	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 4777.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

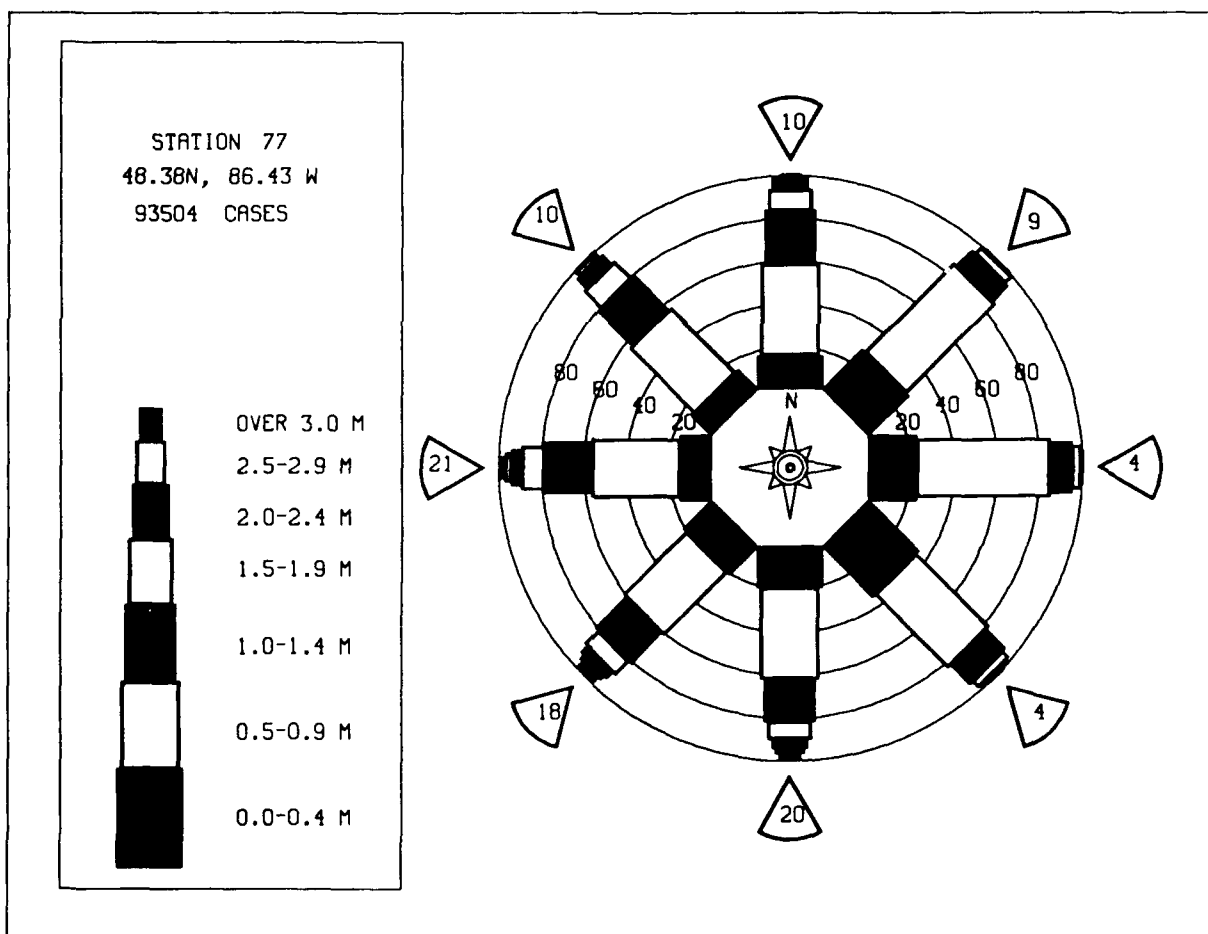
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	116	368	2	.	.	.	.	.	.	.	486
0.50-0.99	.	306	1436	85	.	.	.	.	.	.	1742
1.00-1.49	.	.	928	422	3	.	.	.	.	.	1013
1.50-1.99	.	.	55	210	54	.	.	.	.	.	480
2.00-2.49	.	.	.	10	91	1	.	.	.	.	264
2.50-2.99	8	6	.	.	.	.	102
3.00-3.49	2	.	.	.	.	14
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	116	674	2421	727	156	11	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 3847.

STATION S77 48.38N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	373	1180	254	36	5	.	.	.	.	.	1848
0.50-0.99	.	1313	2751	321	68	21	.	.	.	.	4474
1.00-1.49	.	.	1104	682	126	55	3	.	.	.	1970
1.50-1.99	.	.	116	479	202	51	11	4	.	.	863
2.00-2.49	.	.	.	195	121	77	5	5	.	.	403
2.50-2.99	.	.	.	8	122	55	11	3	1	.	200
3.00-3.49	14	72	11	4	1	.	102
3.50-3.99	36	16	3	.	.	55
4.00-4.49	3	23	5	.	.	31
4.50-4.99	5	9	.	.	14
5.00-5.49	7	1	.	8
5.50-5.99	1	1	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	373	2493	4225	1721	658	370	85	41	5	0	

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S77 (48.38N 86.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.6	1.0	0.8	0.7	0.6	0.6	0.4	0.5	0.6	1.0	0.8	0.8	0.7
1957	1.0	1.0	0.8	0.7	0.7	0.7	0.5	0.6	0.8	0.7	1.0	1.0	0.8
1958	0.7	0.9	0.5	0.7	0.8	0.7	0.5	0.6	0.7	0.7	1.0	1.0	0.8
1959	0.9	1.0	0.8	0.7	0.8	0.5	0.7	0.4	0.7	0.7	1.0	0.8	0.8
1960	0.8	0.8	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.8	1.0	1.0	0.7
1961	0.8	0.7	0.8	0.6	0.7	0.6	0.4	0.6	0.8	0.8	1.0	0.9	0.7
1962	1.1	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.8	1.1	1.2	0.7
1963	1.1	1.2	1.2	1.0	0.9	0.8	0.8	0.7	0.9	1.2	1.1	1.3	1.0
1964	1.4	1.4	1.3	1.1	1.0	0.9	0.7	1.0	1.1	1.3	1.1	1.2	1.1
1965	1.5	1.6	1.0	0.9	1.0	1.0	0.9	0.8	1.0	1.2	1.4	1.3	1.1
1966	1.2	1.6	1.5	1.0	1.0	0.9	0.9	0.8	1.3	1.5	1.5	1.4	1.2
1967	1.4	1.6	1.7	1.1	1.1	0.9	0.8	0.9	1.3	1.7	1.6	1.7	1.3
1968	1.4	1.6	1.7	1.3	1.0	0.8	1.0	0.9	1.0	1.5	1.4	1.4	1.4
1969	1.5	1.2	1.4	1.0	0.9	0.9	0.7	1.0	1.1	1.5	1.4	1.1	1.1
1970	1.2	1.5	1.3	1.1	0.9	0.8	0.7	0.7	1.2	1.5	1.4	1.1	1.1
1971	1.3	1.3	1.3	1.1	0.9	0.7	0.8	0.7	1.1	1.4	1.4	1.2	1.1
1972	1.5	1.2	1.2	0.9	0.6	0.7	0.6	0.6	1.1	1.4	1.2	1.0	1.0
1973	1.3	1.3	1.1	1.0	0.7	0.6	0.7	0.6	1.1	1.2	1.4	1.0	1.0
1974	1.1	1.0	1.2	0.9	0.8	0.8	0.7	0.9	1.1	1.4	1.4	1.1	1.0
1975	1.1	0.9	1.0	0.7	0.6	0.7	0.7	0.9	1.0	1.5	1.4	1.3	1.0
1976	1.3	1.3	1.3	0.8	0.6	0.6	0.4	0.6	0.8	0.8	1.2	1.0	0.9
1977	1.2	1.1	0.9	0.5	0.4	0.4	0.5	0.6	0.7	0.8	1.0	1.0	0.8
1978	1.0	0.8	0.9	0.7	0.5	0.5	0.5	0.9	0.7	1.1	1.2	1.3	0.8
1979	0.9	0.7	0.9	0.5	0.7	0.8	0.5	0.8	1.1	1.3	1.8	1.4	0.9
1980	1.0	0.8	1.0	0.5	0.7	0.6	0.5	0.8	1.5	1.7	1.3	1.2	1.0
1981	0.9	1.0	0.8	0.7	0.6	0.7	0.5	0.5	1.1	1.6	1.5	1.0	0.9
1982	1.4	1.1	1.3	0.9	0.7	0.6	0.6	0.6	1.0	1.6	1.8	1.3	1.1
1983	1.1	1.0	1.0	0.6	0.7	0.7	0.6	0.6	1.3	1.5	1.7	1.3	1.0
1984	1.3	1.0	1.0	0.7	0.7	0.7	0.5	0.6	1.4	1.8	2.1	1.4	1.1
1985	1.2	1.0	1.2	0.7	0.7	0.9	0.6	0.8	1.5	2.0	1.4	1.3	1.1
1986	1.3	0.7	1.2	0.9	0.7	0.7	0.5	0.8	1.1	1.3	1.8	1.4	1.0
1987	1.1	0.9	0.9	0.6	0.5	0.4	0.5	0.6	0.6	0.9	1.1	1.1	0.8
MEAN	1.1	1.1	1.1	0.8	0.7	0.7	0.6	0.7	1.0	1.3	1.3	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S77 (48.38N 86.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.9	2.8	3.0	2.2	1.9	1.9	1.2	1.2	1.7	3.2	2.1	2.7	
1957	2.9	3.0	2.8	2.1	2.4	3.0	1.7	1.6	2.2	1.7	2.4	3.3	
1958	2.5	2.1	1.5	2.2	2.3	2.3	1.6	1.8	2.2	2.4	2.7	2.8	
1959	4.0	4.4	4.8	4.2	4.3	3.5	1.8	1.7	2.2	2.1	2.7	3.5	
1960	2.1	2.2	2.2	2.7	1.3	1.5	1.7	2.2	2.7	2.3	2.8	3.3	
1961	2.3	2.2	2.9	2.3	1.8	1.8	1.2	2.3	2.0	2.3	4.3	2.7	
1962	2.5	2.5	3.0	1.1	1.8	1.5	1.3	1.2	2.9	3.7	3.3	4.8	
1963	2.7	2.5	3.1	2.7	2.6	2.8	2.6	2.7	2.7	4.3	3.0	3.9	
1964	3.8	3.3	4.4	4.5	3.5	2.4	1.7	3.3	4.1	3.7	4.8	3.6	
1965	3.8	4.4	4.6	3.1	2.2	2.2	3.1	2.2	3.3	3.7	4.4	3.2	
1966	3.6	4.4	4.6	4.1	2.8	2.7	3.1	2.2	3.3	3.3	4.4	4.6	
1967	4.0	4.4	4.9	4.4	3.6	3.5	3.1	2.2	3.3	3.3	4.4	4.4	
1968	4.4	4.4	4.3	3.9	3.6	3.0	3.5	2.2	3.3	4.4	4.4	4.4	
1969	4.4	4.4	4.3	3.9	3.6	2.7	1.7	2.2	3.3	3.1	4.4	2.2	
1970	3.7	4.0	3.3	3.8	3.0	2.3	2.1	2.2	3.3	3.3	4.4	4.4	
1971	3.5	4.4	3.3	3.8	3.1	1.7	2.0	2.1	3.3	3.3	4.4	4.4	
1972	2.8	4.4	3.0	2.8	1.6	2.1	1.6	1.9	3.3	3.3	3.3	3.3	
1973	2.8	3.6	2.8	2.8	1.7	1.4	1.9	2.2	3.3	3.3	3.3	3.3	
1974	3.5	3.1	3.4	2.7	2.0	2.0	1.6	2.2	3.3	3.3	3.3	4.4	
1975	3.9	2.2	3.3	1.6	2.7	2.4	2.1	3.3	3.3	3.3	3.3	3.3	
1976	4.4	4.2	4.1	3.5	2.3	2.1	1.3	2.2	3.3	3.3	4.4	4.4	
1977	3.7	3.3	3.3	3.4	1.7	1.1	2.1	2.2	3.3	3.7	6.7	3.2	
1978	3.8	3.1	3.8	2.8	1.1	1.5	1.5	2.2	3.3	3.3	4.4	4.4	
1979	3.2	3.3	3.3	2.8	2.0	3.3	1.4	3.3	3.3	3.3	3.3	3.3	
1980	3.4	3.3	3.6	1.8	2.3	2.2	1.9	3.3	3.3	3.3	4.4	3.3	
1981	2.5	3.3	3.0	2.4	1.4	3.3	2.2	1.1	3.3	3.3	3.3	3.3	
1982	4.4	3.3	3.0	3.0	3.6	2.1	2.0	2.2	3.3	3.3	4.4	4.4	
1983	4.4	3.3	3.6	2.4	1.1	3.1	3.1	2.2	3.3	3.3	4.4	4.4	
1984	5.2	3.3	3.8	4.0	2.3	3.3	1.9	3.3	3.3	3.3	4.4	4.4	
1985	4.4	3.3	3.3	2.2	2.1	1.1	2.2	2.1	3.3	3.3	3.3	3.3	
1986	4.4	3.3	3.3	3.7	2.4	1.6	1.2	1.0	3.3	3.3	3.3	3.3	
1987	3.1	3.7	3.3	3.1	2.9	1.3	1.9	1.8	1.8	3.2	3.8	4.1	

32 YR. STATISTICS FOR WIS STATION S77

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	280.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	58112906

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	336	350	7	.	.	.	.	.	.	.	693
0.50-0.99	.	1627	1456	.	.	.	.	.	.	.	3083
1.00-1.49	.	.	961	3	.	.	.	.	.	.	964
1.50-1.99	.	.	295	245	.	.	.	.	.	.	540
2.00-2.49	.	.	.	90	.	.	.	.	.	.	90
2.50-2.99	.	.	.	7	2	.	.	.	.	.	9
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	336	1977	2719	345	3	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5037.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	281	656	5	.	.	.	.	.	.	.	942
0.50-0.99	.	1553	882	1	.	.	.	.	.	.	2436
1.00-1.49	.	.	653	.	.	.	.	.	.	.	653
1.50-1.99	.	.	225	154	.	.	.	.	.	.	379
2.00-2.49	.	.	.	59	.	.	.	.	.	.	59
2.50-2.99	.	.	.	4	1	.	.	.	.	.	5
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	281	2209	1765	218	2	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4189.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	507	1006	11	.	.	.	.	.	.	.	1524
0.50-0.99	.	2186	433	.	1	.	.	.	.	.	2620
1.00-1.49	.	.	311	.	.	.	.	.	.	.	311
1.50-1.99	.	.	128	16	2	.	.	.	.	.	146
2.00-2.49	.	.	1	5	.	.	.	.	.	.	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	507	3192	884	21	3	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4311.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	285	749	7	.	.	.	.	.	.	.	1041
0.50-0.99	.	1688	253	2	.	1	.	.	.	.	1944
1.00-1.49	.	.	242	.	.	.	.	.	.	.	243
1.50-1.99	.	.	94	2	.	.	.	.	.	.	96
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	285	2437	596	5	0	1	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 3112.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	301	744	10	1	.	.	.	.	.	.	1056
0.50-0.99	.	727	44	1	.	.	.	.	.	.	772
1.00-1.49	.	.	116	.	.	.	.	.	.	.	116
1.50-1.99	.	.	14	.	.	.	.	.	.	.	14
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	301	1471	184	3	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 1836.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	192	437	4	.	.	.	.	.	.	.	633
0.50-0.99	.	426	65	.	.	.	.	.	.	.	491
1.00-1.49	.	.	55	1	.	.	.	.	.	.	56
1.50-1.99	.	.	18	18	.	.	.	.	.	.	36
2.00-2.49	.	.	.	4	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	192	863	142	23	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 1144.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	242	398	25	16	5	.	.	.	.	.	686
0.50-0.99	.	552	254	5	22	22	.	.	.	.	845
1.00-1.49	.	.	148	.	.	3	.	.	.	.	160
1.50-1.99	.	.	24	23	.	2	3	1	.	.	53
2.00-2.49	.	.	.	16	.	1	.	.	.	.	17
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	242	950	451	62	27	34	6	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 1666.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	331	753	409	271	90	1	.	.	.	.	1855
0.50-0.99	.	773	1224	182	201	146	3	.	.	.	2529
1.00-1.49	.	.	503	102	25	67	12	.	.	.	708
1.50-1.99	.	.	63	152	23	25	2	.	.	.	270
2.00-2.49	.	.	.	105	22	14	3	2	.	.	151
2.50-2.99	.	.	.	19	25	7	6	5	.	.	90
3.00-3.49	24	14	1	.	.	.	39
3.50-3.99	28	.	.	.	.	28
4.00-4.49	9	8	.	.	.	17
4.50-4.99	2	13	1	.	.	16
5.00-5.49	3	.	.	3
5.50-5.99	0
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	331	1526	2199	831	438	313	51	23	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 5363.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0 00-0.49	382	1106	945	28							2461
0 50-0.99		818	3093	1392	94	12					5409
1 00-1.49			731	1012	625	57	1				2426
1 50-1.99			63	359	360	185	1	1			969
2 00-2.49				141	110	136	17	3			407
2 50-2.99				6	150	60	25	10			251
3 00-3.49					20	97	18	10	2		147
3 50-3.99						66	21	7			94
4 00-4.49						6	37	10	1		54
4 50-4.99							9	17	2		28
5 00-5.49						1		12	3		16
5 50-5.99								9	2		11
6 00-6.49									1		1
6 50-6.99									3		3
7 00+									1	1	2
TOTAL	382	1924	4832	2938	1359	620	129	79	15	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 11502.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0 00-0.49	360	1024	443	22	1						1850
0 50-0.99		728	2378	606	48	4					3764
1 00-1.49			687	843	301	33					1864
1 50-1.99			66	355	334	129	4				888
2 00-2.49				134	121	172	19	1			447
2 50-2.99				2	146	85	41	3			277
3 00-3.49					16	124	28	12			180
3 50-3.99						71	38	12	2		123
4 00-4.49						5	56	14	3		78
4 50-4.99							13	24	2		39
5 00-5.49								11	5		16
5 50-5.99								3	6		9
6 00-6.49									3		3
6 50-6.99									2		2
7 00+											0
TOTAL	360	1752	3574	1962	967	623	199	80	23	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 8941.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0 00-0.49	336	1104	517	86	3	1					2047
0 50-0.99		816	2639	536	171	40	2				4204
1 00-1.49			841	844	220	145	12				2062
1 50-1.99			48	375	286	101	16	2			828
2 00-2.49				118	118	117	6	4			363
2 50-2.99				2	108	75	22	5	1		213
3 00-3.49					9	89	25	10	4		137
3 50-3.99						59	37	7	2		105
4 00-4.49						3	33	6	1		43
4 50-4.99							8	20	1		29
5 00-5.49								11	4		15
5 50-5.99								7	4		11
6 00-6.49									1		1
6 50-6.99									1		1
7 00+									1		1
TOTAL	336	1920	4045	1961	915	630	161	72	20	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 9429.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0 00-0.49	319	1444	484	67	23	1					2338
0 50-0.99		973	3597	402	150	146	5				5273
1 00-1.49			999	1191	130	192	84	11			2608
1 50-1.99			55	526	325	59	59	53			1082
2 00-2.49				136	181	135	18	23	4	1	498
2 50-2.99				1	185	115	12	8	9		330
3 00-3.49					10	154	22	7	1		194
3 50-3.99						63	31	8	2	1	105
4 00-4.49						1	60	23	1		85
4 50-4.99							11	25	5	1	42
5 00-5.49								21	8		29
5 50-5.99								7	11		18
6 00-6.49									6	1	7
6 50-6.99									5	1	6
7 00+									1	2	3
TOTAL	319	2417	5135	2323	1004	866	302	186	59	7	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 11825.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	280	1235	174	159	2	23	.	.	.	.	1691
0.50-0.99	.	1023	3703	1332	16	22	14	5	.	.	4924
1.00-1.49	.	.	1328	1332	56	22	14	5	.	.	2757
1.50-1.99	.	.	97	700	314	31	10	17	1	.	1170
2.00-2.49	.	.	1	197	241	126	6	11	6	1	589
2.50-2.99	.	.	.	8	164	120	5	2	1	2	300
3.00-3.49	4	122	6	.	.	1	135
3.50-3.99	67	17	4	1	.	89
4.00-4.49	2	27	2	.	.	31
4.50-4.99	8	4	1	.	13
5.00-5.49	1	2	1	.	4
5.50-5.99	1	2	.	3
6.00-6.49	1	1	1	2
6.50-6.99	1	1	2
7.00+	1	1	2
TOTAL	280	2258	5303	2396	797	513	94	49	15	6	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 10969.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	175	894	71	54	.	.	.	.	.	.	1140
0.50-0.99	.	784	2486	339	4	.	.	.	.	.	3324
1.00-1.49	.	.	1392	476	56	2	.	.	.	.	1735
1.50-1.99	.	.	185	210	38	13	2	.	.	.	724
2.00-2.49	.	.	.	25	50	20	1	.	.	.	262
2.50-2.99	.	.	.	2	2	35	1	.	1	.	96
3.00-3.49	13	2	.	.	.	40
3.50-3.99	1	7	.	.	.	15
4.00-4.49	1	.	.	.	8
4.50-4.99	2
5.00-5.49	1	1	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	175	1678	4134	1106	150	87	14	2	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 6882.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	136	438	12	8	.	.	.	.	.	.	586
0.50-0.99	.	540	1420	27	2	.	.	.	.	.	1968
1.00-1.49	.	.	924	346	12	.	.	.	.	.	953
1.50-1.99	.	.	116	158	2	.	.	.	.	.	474
2.00-2.49	.	.	.	21	8	.	.	.	.	.	161
2.50-2.99	3	.	.	.	.	.	29
3.00-3.49	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	136	978	2472	561	27	0	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 3910.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	149	279	2	.	.	.	.	.	.	.	430
0.50-0.99	.	858	988	2	.	.	.	.	.	.	1846
1.00-1.49	.	.	788	236	.	.	.	.	.	.	790
1.50-1.99	.	.	150	146	.	.	.	.	.	.	386
2.00-2.49	.	.	.	10	7	.	.	.	.	.	146
2.50-2.99	3	.	.	.	.	.	17
3.00-3.49	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	149	1137	1928	394	10	0	0	0	0	0	

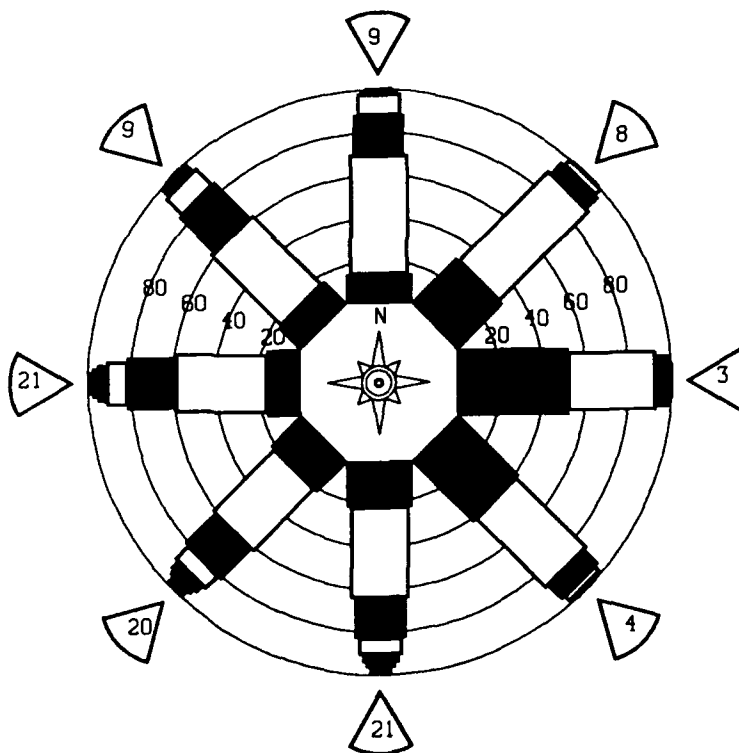
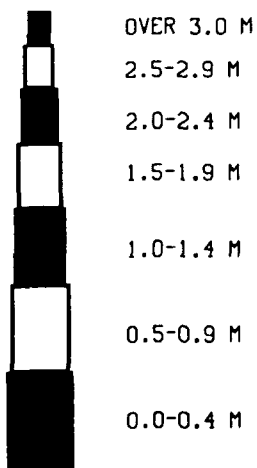
MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 3388.

STATION S78 48.52N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	462	1262	313	49	12	.	.	.	.	.	2098
0.50-0.99	.	1607	2492	335	70	39	1	.	.	.	4544
1.00-1.49	.	.	1068	570	136	52	12	1	.	.	1839
1.50-1.99	.	.	164	398	171	54	10	7	.	.	804
2.00-2.49	.	.	.	152	83	71	7	5	.	.	319
2.50-2.99	.	.	.	11	87	48	11	3	1	.	161
3.00-3.49	9	63	10	4	.	.	86
3.50-3.99	37	14	4	.	.	55
4.00-4.49	2	23	5	.	.	30
4.50-4.99	6	9	.	.	16
5.00-5.49	2	.	.	8
5.50-5.99	2	.	.	5
6.00-6.49	1	.	.	1
6.50-6.99	1
7.00+	0
TOTAL	462	2869	4037	1515	568	366	94	47	9	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.

STATION 78
48.52N, 86.43 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S78 (48.52N 86.43W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.0	0.5	0.7	0.7	0.6	0.6	0.4	0.5	0.5	0.7	0.7	0.7	0.6
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.1	1.0	1.0	0.8	0.7	0.7	0.6	0.7	1.0	1.2	1.3	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S78 (48.52N 86.43W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.7	2.7	2.9	1.9	1.9	1.9	1.2	1.3	1.7	3.3	2.1	2.2	
1957	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1958	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1959	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1960	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1961	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1962	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1963	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1964	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1965	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1966	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1967	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1968	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1969	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1970	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1971	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1972	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1973	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1974	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1975	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1976	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1977	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1978	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1979	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1980	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1981	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1982	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1983	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1984	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1985	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1986	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	
1987	2.2	2.0	2.1	2.1	2.5	2.0	1.4	1.6	1.9	3.3	2.3	2.2	

32 YR. STATISTICS FOR WIS STATION S78

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	231.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82112106

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	447	1189	9	.	.	.	.	.	.	.	1645
0.50-0.99	.	2116	132	.	.	.	.	.	.	.	2248
1.00-1.49	.	.	616	.	.	.	.	.	.	.	616
1.50-1.99	.	.	91	.	.	.	.	.	.	.	91
2.00-2.49	.	.	4	2	.	.	.	.	.	.	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	447	3305	852	2	0	0	0	0	0	0	4310

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4310.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	389	823	5	.	.	1	.	.	.	.	1217
0.50-0.99	.	1810	347	.	.	.	.	.	.	.	2158
1.00-1.49	.	.	510	.	.	.	.	.	.	.	510
1.50-1.99	.	.	196	10	.	.	.	.	.	.	206
2.00-2.49	.	.	.	6	.	.	.	.	.	.	6
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	389	2633	1058	16	0	1	0	0	0	0	3835

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3835.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	563	1115	9	.	.	1	.	.	.	.	1687
0.50-0.99	.	2252	388	.	.	.	.	.	.	.	2641
1.00-1.49	.	.	253	.	.	.	.	.	.	.	253
1.50-1.99	.	.	114	13	.	.	.	.	.	.	127
2.00-2.49	.	.	.	4	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	563	3367	764	17	0	1	0	0	0	0	4410

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4410.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	321	730	5	.	1	.	.	.	.	.	1057
0.50-0.99	.	1803	258	.	.	1	.	.	.	.	2062
1.00-1.49	.	.	280	.	.	.	.	.	.	.	280
1.50-1.99	.	.	109	5	.	.	.	.	.	.	114
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	321	2533	652	6	1	1	0	0	0	0	3289

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3289.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	365	735	5	.	.	.	.	.	.	.	1105
0.50-0.99	.	722	29	.	.	.	.	.	.	.	751
1.00-1.49	.	.	125	.	.	.	.	.	.	.	125
1.50-1.99	.	.	9	1	.	.	.	.	.	.	10
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	365	1457	168	1	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 1866.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	244	426	3	.	.	.	.	.	.	.	673
0.50-0.99	.	421	20	.	.	.	.	.	.	.	441
1.00-1.49	.	.	55	.	.	.	.	.	.	.	55
1.50-1.99	.	.	6	.	.	.	.	.	.	.	6
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	244	847	84	0	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 1102.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	244	405	18	2	3	.	.	.	.	.	672
0.50-0.99	.	630	44	1	1	19	.	.	.	.	695
1.00-1.49	.	.	63	.	.	1	1	.	.	.	65
1.50-1.99	.	.	17	2	.	.	.	.	.	.	19
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	244	1035	142	7	4	20	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1363.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	420	885	309	176	116	22	.	.	.	.	1928
0.50-0.99	.	1180	590	77	79	112	9	.	.	.	2047
1.00-1.49	.	.	187	68	17	33	6	.	.	.	311
1.50-1.99	.	.	41	39	7	6	3	7	.	.	103
2.00-2.49	.	.	2	25	4	6	3	6	.	.	46
2.50-2.99	.	.	.	2	17	.	.	.	.	.	19
3.00-3.49	5	7	.	1	.	.	13
3.50-3.99	13	.	.	.	.	13
4.00-4.49	1	1	.	.	.	2
4.50-4.99	1	1	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	420	2065	1129	387	245	201	23	14	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4205.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	458	1223	1209	53	4	2	.	.	.	.	2949
0.50-0.99	.	1147	3228	1629	159	17	.	.	.	.	6180
1.00-1.49	.	.	717	1007	716	102	5	1	.	.	2548
1.50-1.99	.	.	82	383	302	187	7	6	.	.	967
2.00-2.49	.	.	.	164	109	139	34	5	.	.	451
2.50-2.99	.	.	.	10	141	65	20	17	.	.	253
3.00-3.49	28	117	13	7	3	.	168
3.50-3.99	62	22	10	1	.	95
4.00-4.49	3	54	10	2	.	69
4.50-4.99	1	14	19	1	.	35
5.00-5.49	3	17	2	.	22
5.50-5.99	10	6	.	16
6.00-6.49	3	1	4
6.50-6.99	2	2
7.00+
TOTAL	458	2370	5236	3246	1459	695	172	102	24	3	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.8 NO. OF CASES= 12893.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	430	1153	567	60	3	3	.	.	.	.	2216
0.50-0.99	.	924	2483	758	101	19	.	.	.	.	4286
1.00-1.49	.	.	699	848	365	62	2	.	.	.	1976
1.50-1.99	.	.	68	330	349	152	13	.	.	.	915
2.00-2.49	.	.	1	119	126	179	29	3	.	.	457
2.50-2.99	.	.	.	6	142	97	45	10	.	.	300
3.00-3.49	13	120	29	23	1	.	186
3.50-3.99	65	40	6	3	.	114
4.00-4.49	5	50	23	3	.	81
4.50-4.99	5	40	4	.	49
5.00-5.49	14	8	.	22
5.50-5.99	2	5	1	7
6.00-6.49	5	.	6
6.50-6.99	4	.	4
7.00+	1	.	1
TOTAL	430	2077	3818	2121	1099	705	214	121	34	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 9954.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	381	1412	741	173	38	5	.	.	.	.	2750
0.50-0.99	.	1034	2908	681	301	167	20	1	.	.	5112
1.00-1.49	.	.	854	895	245	214	59	11	.	.	2278
1.50-1.99	.	.	49	391	330	121	41	11	.	.	943
2.00-2.49	.	.	.	118	127	129	12	8	1	.	395
2.50-2.99	.	.	.	1	105	84	32	6	4	.	232
3.00-3.49	11	97	25	14	3	.	150
3.50-3.99	60	37	12	1	.	110
4.00-4.49	1	42	16	1	.	60
4.50-4.99	7	19	1	.	27
5.00-5.49	20	2	.	22
5.50-5.99	3	4	.	7
6.00-6.49	7	.	7
6.50-6.99	1	.	1
7.00+	1	1
TOTAL	381	2446	4552	2259	1157	878	275	121	25	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 11335.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	370	1853	697	83	27	11	1	.	.	.	3042
0.50-0.99	.	1579	3825	748	199	235	28	3	.	.	6617
1.00-1.49	.	.	1142	1220	252	193	137	39	2	.	2985
1.50-1.99	.	.	68	536	344	86	50	38	8	.	1130
2.00-2.49	.	.	.	134	192	159	12	22	4	1	524
2.50-2.99	.	.	.	2	192	119	11	5	3	.	332
3.00-3.49	11	166	21	10	.	.	208
3.50-3.99	51	41	7	3	1	103
4.00-4.49	5	50	22	5	.	82
4.50-4.99	10	25	2	.	37
5.00-5.49	28	6	2	36
5.50-5.99	3	11	3	17
6.00-6.49	1	8	4	13
6.50-6.99	7	3	10
7.00+	1	4	5
TOTAL	370	3432	5732	2723	1217	1025	361	203	60	18	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 14187.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	375	1549	161	2	4	1					2092
0.50-0.99		2217	3015	97	22	16	2				3369
1.00-1.49			1317	773	67	47	11				2215
1.50-1.99			160	542	203	34	10	7	2		958
2.00-2.49				2	161	71	7	3	3	1	409
2.50-2.99					4	133	4		1		212
3.00-3.49						115	2	1			124
3.50-3.99						57	4				65
4.00-4.49						1	19				22
4.50-4.99							5		1		6
5.00-5.49											2
5.50-5.99									1		4
6.00-6.49									1		2
6.50-6.99											0
7.00+									1		1
TOTAL	375	3766	4655	1579	596	411	67	23	10	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 10754.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	250	1011	29								1290
0.50-0.99		2171	624								2795
1.00-1.49			524	18							542
1.50-1.99			168	42	8	1					219
2.00-2.49				23	3	3					33
2.50-2.99				1	7						8
3.00-3.49						8					8
3.50-3.99						2					2
4.00-4.49											0
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	250	3182	1349	84	18	14	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4587.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	171	481	3								655
0.50-0.99		1467	250								1717
1.00-1.49			344	12							356
1.50-1.99			129	11							140
2.00-2.49				8							8
2.50-2.99					1						1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	171	1948	726	31	1	0	0	0	0	0	

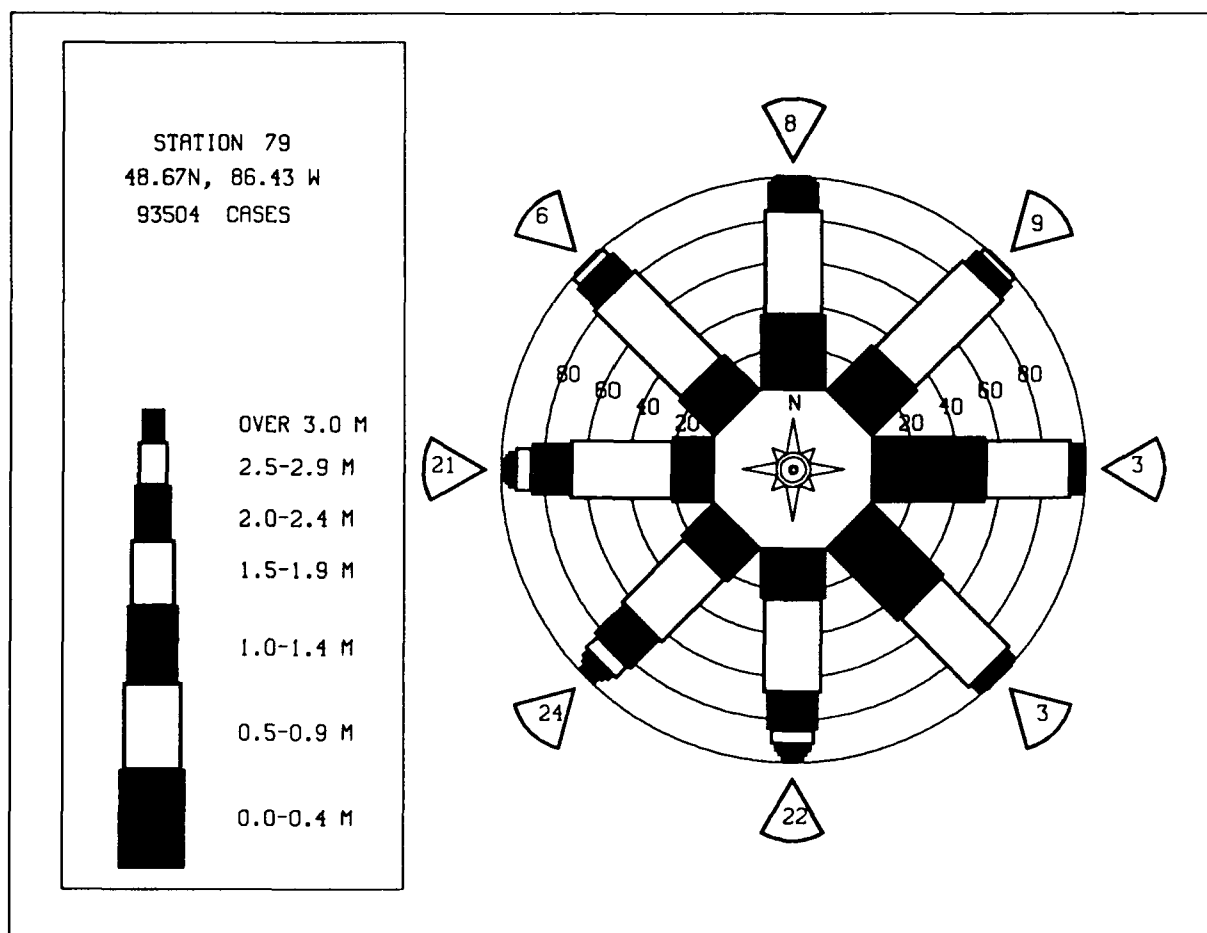
MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2694.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	204	664	5								873
0.50-0.99		1342	194								1536
1.00-1.49			361								361
1.50-1.99			119	11							130
2.00-2.49				5							5
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	204	2006	679	16	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 2720.

STATION S79 48.67N 86.43W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	564	1566	378	55	19	4	6	.	.	.
0.50-0.99	.	2282	1834	399	86	59	22	.	.	.
1.00-1.49	.	.	805	484	166	65	12	5	.	.
1.50-1.99	.	.	143	232	154	59	12	7	1	.
2.00-2.49	.	.	1	77	72	68	10	4	.	.
2.50-2.99	.	.	.	2	74	43	11	3	.	.
3.00-3.49	7	63	9	5	.	.
3.50-3.99	31	14	3	.	.
4.00-4.49	1	21	7	1	.
4.50-4.99	4	10	.	.
5.00-5.49	8	1	.
5.50-5.99	2	2	.
6.00-6.49	1	.
6.50-6.99
7.00+
TOTAL	564	3848	3161	1249	578	393	109	54	8	0
MEAN HS(M)=	0.9	LARGEST HS(M)=	7.7	MEAN TP(SEC)=	4.1	TOTAL CASES=	93504.			



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S79 (48.67N 86.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1957	0.8	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.8	0.8	0.7
1958	0.6	0.6	0.4	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.8	0.8	0.6
1959	0.8	0.8	0.7	0.6	0.7	0.5	0.6	0.4	0.7	0.6	0.8	0.7	0.6
1960	0.7	0.6	0.6	0.6	0.4	0.5	0.5	0.6	0.6	0.7	0.9	0.9	0.6
1961	0.7	0.7	0.7	0.5	0.6	0.5	0.4	0.5	0.7	0.7	0.9	0.7	0.6
1962	0.9	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	1.0	1.0	0.6
1963	0.9	1.0	1.0	0.8	0.8	0.7	0.7	0.6	0.9	1.1	0.9	1.1	0.9
1964	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.9	1.0	1.2	0.9	1.0	1.0
1965	1.3	1.3	0.9	0.8	0.9	0.9	0.8	0.7	0.9	1.0	1.2	1.1	1.0
1966	1.0	1.3	1.2	0.8	0.9	0.9	0.9	0.7	1.1	1.4	1.2	1.1	1.0
1967	1.2	1.4	1.5	1.0	1.0	0.8	0.7	0.8	1.3	1.6	1.4	1.5	1.2
1968	1.2	1.2	1.5	1.1	1.1	0.9	0.7	0.8	0.9	1.4	1.2	1.2	1.1
1969	1.3	1.0	1.0	0.8	0.8	0.8	0.7	0.9	1.0	1.4	1.3	0.9	1.0
1970	1.0	1.3	1.0	0.8	0.8	0.7	0.6	0.7	1.1	1.4	1.2	1.0	1.0
1971	1.1	1.1	1.0	0.9	0.7	0.6	0.8	0.6	1.0	1.3	1.3	1.0	1.0
1972	1.3	1.0	0.9	0.8	0.5	0.6	0.6	0.6	1.1	1.3	1.1	0.8	0.9
1973	1.1	1.1	0.9	0.9	0.6	0.5	0.6	0.6	1.0	1.1	1.2	0.9	0.9
1974	1.0	0.8	0.8	0.8	0.7	0.7	0.6	0.8	1.0	1.3	1.1	1.0	0.9
1975	1.0	0.8	0.8	0.5	0.6	0.7	0.7	0.8	0.9	1.4	1.3	1.1	0.9
1976	1.1	1.1	1.0	0.6	0.5	0.5	0.4	0.5	0.7	0.7	1.1	1.0	0.8
1977	1.0	0.9	0.8	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.9	0.8	0.7
1978	0.8	0.7	0.8	0.6	0.4	0.5	0.4	0.8	0.7	0.9	1.0	1.2	0.7
1979	0.8	0.5	0.8	0.4	0.7	0.7	0.4	0.8	1.0	1.3	1.6	1.2	0.8
1980	0.9	0.7	0.8	0.4	0.6	0.6	0.5	0.8	1.4	1.5	1.2	1.0	0.9
1981	0.7	0.8	0.7	0.6	0.6	0.7	0.4	0.5	1.0	1.5	1.3	0.8	0.8
1982	1.1	1.0	1.1	0.7	0.7	0.6	0.5	0.5	1.0	1.5	1.7	1.1	1.0
1983	0.9	0.9	0.8	0.5	0.7	0.6	0.5	0.6	1.2	1.4	1.7	1.2	0.9
1984	1.1	0.8	0.8	0.6	0.7	0.7	0.5	0.6	1.3	1.8	1.9	1.2	1.0
1985	1.0	0.8	1.0	0.6	0.7	0.9	0.5	0.8	1.6	2.0	1.2	1.1	1.0
1986	1.1	0.6	1.0	0.7	0.6	0.6	0.5	0.7	1.0	1.3	1.7	1.2	0.9
1987	0.9	0.8	0.7	0.5	0.5	0.4	0.4	0.5	0.5	0.8	0.9	1.0	0.7
MEAN	1.0	0.9	0.9	0.7	0.7	0.6	0.6	0.6	0.9	1.2	1.2	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S79 (48.67N 86.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.5	2.7	3.0	1.6	1.9	1.9	1.1	1.3	1.7	3.2	2.0	1.8
1957	2.9	3.0	2.9	2.1	2.4	3.0	1.2	1.6	1.8	1.8	2.3	2.6
1958	2.4	1.9	1.0	3.8	1.7	2.0	1.2	1.4	1.8	2.3	7.0	2.7
1959	3.8	4.7	2.8	2.0	3.3	1.9	1.8	1.6	2.2	1.7	2.7	2.7
1960	1.8	1.9	1.8	2.3	1.2	1.3	1.7	2.7	1.8	1.9	2.8	3.7
1961	2.3	2.2	2.6	2.1	1.5	2.3	1.2	2.3	1.8	2.2	4.6	2.5
1962	2.4	2.5	1.9	1.5	1.5	1.5	1.1	1.2	1.6	3.9	3.4	5.0
1963	2.7	3.5	3.1	2.2	2.7	2.7	2.6	1.2	2.7	4.1	2.5	4.1
1964	5.3	4.4	4.7	4.4	3.3	2.4	1.7	3.2	4.3	5.8	4.4	3.7
1965	3.9	3.8	2.3	3.0	2.9	3.1	1.8	2.0	3.2	3.2	4.7	3.0
1966	3.5	4.7	4.7	4.0	2.9	2.7	3.1	2.7	3.2	5.6	5.2	4.5
1967	4.0	5.0	4.7	3.2	3.3	2.6	1.6	2.2	4.0	6.1	4.2	5.0
1968	4.9	3.7	4.9	3.6	2.8	2.9	3.4	2.4	3.3	4.4	4.7	4.3
1969	4.5	4.0	3.8	2.8	2.7	2.7	1.6	2.6	4.0	5.8	5.6	2.6
1970	3.7	4.2	3.4	3.5	3.0	2.0	1.6	2.0	4.0	6.0	5.2	3.9
1971	3.4	4.7	3.8	2.8	2.7	1.6	2.2	1.6	4.5	6.3	6.2	4.3
1972	4.0	4.7	3.1	2.5	1.3	1.6	1.4	1.9	4.6	4.9	5.4	3.0
1973	2.8	3.8	4.3	2.6	1.6	1.3	1.7	1.8	3.8	4.5	5.1	5.3
1974	4.5	3.2	3.2	2.7	2.0	2.0	1.6	3.3	3.1	4.1	4.0	3.8
1975	3.8	2.1	2.6	1.2	2.8	2.7	2.1	3.5	3.2	7.2	5.2	3.6
1976	4.6	3.8	4.1	3.5	1.8	1.9	1.1	2.0	3.0	3.4	3.9	4.9
1977	3.9	3.5	3.0	1.1	1.5	1.2	1.6	2.0	5.3	3.7	7.4	3.0
1978	2.7	1.7	3.7	2.3	1.4	1.6	1.5	2.2	2.7	3.8	4.1	4.4
1979	3.1	2.1	1.7	1.3	3.8	3.4	1.1	3.2	2.9	4.8	6.5	3.9
1980	4.9	3.3	3.2	1.5	2.3	1.9	1.7	3.1	7.2	5.3	5.0	4.3
1981	2.7	2.7	2.8	2.3	1.3	3.7	1.1	1.2	6.2	6.2	5.9	4.4
1982	4.3	3.5	6.9	4.4	3.4	2.9	1.8	2.6	3.0	6.7	7.7	4.6
1983	4.2	5.3	2.2	2.4	1.6	2.0	3.1	2.8	4.7	5.8	5.7	3.7
1984	4.9	2.6	3.8	4.0	2.5	3.4	1.3	3.2	6.0	6.8	7.7	5.2
1985	3.9	3.7	4.2	1.7	1.9	3.0	2.4	2.8	6.8	6.2	3.7	4.9
1986	4.7	1.6	4.5	2.3	1.7	1.4	1.2	3.3	4.1	6.8	7.2	4.3
1987	3.2	3.6	2.6	2.5	2.9	1.3	1.9	1.7	1.6	3.2	3.6	3.8

32 YR. STATISTICS FOR WIS STATION S79

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	174.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	84110400

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	416	1222	9	.	1	.	.	.	.	.	1647
0.50-0.99	.	2045	177	.	.	.	.	.	.	.	2223
1.00-1.49	.	.	612	1	.	.	1	.	.	.	614
1.50-1.99	.	.	86	2	.	.	.	.	.	.	98
2.00-2.49	.	.	5	2	2	.	.	.	.	.	9
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	416	3267	899	5	3	0	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 4297.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	296	748	3	.	.	1	.	.	.	.	1047
0.50-0.99	.	1460	312	.	1	1	1	.	.	.	1773
1.00-1.49	.	.	440	1	.	.	1	.	.	.	443
1.50-1.99	.	.	158	17	.	.	1	.	.	.	176
2.00-2.49	.	.	.	10	.	.	.	.	.	.	10
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	296	2208	913	29	1	1	2	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3230.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	542	1140	14	.	.	.	.	.	.	.	1696
0.50-0.99	.	2181	413	.	1	.	.	.	.	.	2595
1.00-1.49	.	.	295	1	.	.	.	.	.	.	296
1.50-1.99	.	.	118	14	.	.	.	.	.	.	132
2.00-2.49	.	.	1	3	.	.	.	.	.	.	4
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	542	3321	841	18	1	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4421.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	241	476	3	.	.	.	.	.	.	.	720
0.50-0.99	.	1874	583	1	.	.	.	.	.	.	2458
1.00-1.49	.	.	452	.	.	1	1	.	.	.	454
1.50-1.99	.	.	160	43	1	1	1	.	.	.	206
2.00-2.49	.	.	1	19	.	.	.	.	.	.	20
2.50-2.99	.	.	.	1	1	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	241	2350	1199	64	2	2	2	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 3615.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	303	376	9	.	.	.	.	.	.	.	688
0.50-0.99	.	826	555	1	.	1	.	.	.	.	1381
1.00-1.49	.	.	214	48	.	.	.	.	.	.	216
1.50-1.99	.	.	58	10	.	.	.	.	.	.	106
2.00-2.49	10
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	303	1202	836	59	0	1	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2250.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	190	226	8	.	.	.	.	.	.	.	424
0.50-0.99	.	509	372	1	.	.	.	.	.	.	881
1.00-1.49	.	.	121	25	.	.	.	.	.	.	122
1.50-1.99	.	.	28	16	.	.	.	.	.	.	53
2.00-2.49	1	.	.	.	.	.	16
2.50-2.99	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	190	735	529	42	1	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 1404.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	235	353	25	8	5	.	.	.	.	.	626
0.50-0.99	.	458	553	14	25	17	.	.	.	.	1061
1.00-1.49	.	.	237	2	14	1	.	.	.	.	266
1.50-1.99	.	.	20	56	2	6	2	.	.	.	86
2.00-2.49	.	.	.	29	5	.	.	2	.	.	36
2.50-2.99	.	.	.	4	11	.	1	.	.	.	16
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	811	835	119	50	37	4	2	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 1969.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	386	845	475	264	82	1	.	.	.	.	2053
0.50-0.99	.	841	1723	268	233	119	1	.	.	.	3185
1.00-1.49	.	.	653	254	77	89	10	.	.	.	1083
1.50-1.99	.	.	68	282	60	36	7	.	.	.	455
2.00-2.49	.	.	.	157	49	23	3	2	.	.	235
2.50-2.99	.	.	.	14	113	16	4	2	.	.	149
3.00-3.49	.	.	.	1	45	52	8	5	.	.	115
3.50-3.99	49	7	5	.	.	61
4.00-4.49	19	18	1	.	.	38
4.50-4.99	20	1	.	.	29
5.00-5.49	2	13	2	.	19
5.50-5.99	9	5	.	16
6.00-6.49	3	.	7
6.50-6.99	4	4
7.00+	0
TOTAL	386	1686	2919	1240	659	404	84	53	17	4	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 6989.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	399	1146	1255	108	4	4	.	.	.	.	2916
0.50-0.99	.	805	3112	2152	155	21	.	.	.	.	6245
1.00-1.49	.	.	630	1018	864	79	2	.	.	.	2583
1.50-1.99	.	.	53	325	325	250	1	.	.	.	954
2.00-2.49	.	.	.	170	88	166	26	1	.	.	451
2.50-2.99	.	.	.	10	174	65	28	9	.	.	286
3.00-3.49	.	.	.	1	21	125	19	11	3	.	180
3.50-3.99	3	89	27	12	2	.	133
4.00-4.49	9	41	14	2	.	66
4.50-4.99	1	16	26	2	.	45
5.00-5.49	17	5	.	22
5.50-5.99	8	.	8
6.00-6.49	1	5	.	6
6.50-6.99	1	.	1
7.00+	2	1	3
TOTAL	399	1951	5050	3784	1634	809	160	91	30	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 13026.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	375	1080	529	68	6	2	.	.	.	.	2060
0.50-0.99	.	775	1932	587	103	23	1	.	.	.	3421
1.00-1.49	.	.	514	667	282	77	1	.	.	.	1541
1.50-1.99	.	.	33	281	280	152	3	.	.	.	749
2.00-2.49	.	.	.	128	106	159	17	1	.	.	411
2.50-2.99	.	.	.	2	136	90	26	7	.	.	261
3.00-3.49	12	126	18	22	.	.	178
3.50-3.99	1	65	31	9	2	.	108
4.00-4.49	8	47	19	3	.	77
4.50-4.99	1	6	23	3	.	38
5.00-5.49	2	24	3	.	29
5.50-5.99	4	7	.	11
6.00-6.49	7	.	7
6.50-6.99	4	.	4
7.00+	2	2	2
TOTAL	375	1855	3008	1733	926	703	152	114	29	2	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 8338.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	366	1505	839	166	44	10	2	.	.	.	2932
0.50-0.99	.	816	2714	612	283	201	23	1	.	.	4652
1.00-1.49	.	.	736	816	207	199	60	12	.	.	2030
1.50-1.99	.	.	42	361	258	127	39	7	.	.	834
2.00-2.49	.	.	.	104	103	103	14	8	1	.	344
2.50-2.99	.	.	.	2	106	77	27	7	4	.	223
3.00-3.49	11	104	26	14	4	.	159
3.50-3.99	77	38	8	.	.	123
4.00-4.49	1	41	18	4	.	64
4.50-4.99	8	26	2	.	36
5.00-5.49	17	2	.	19
5.50-5.99	5	4	.	9
6.00-6.49	9	.	9
6.50-6.99	2	2	4
7.00+	1	1	3
TOTAL	366	2321	4331	2061	1025	899	278	123	33	4	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 10726.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	393	1910	599	84	25	10	1	.	.	.	3022
0.50-0.99	.	1343	3640	633	139	194	23	2	.	.	5974
1.00-1.49	.	.	1161	1118	193	162	124	32	.	.	2791
1.50-1.99	.	.	64	562	293	77	44	22	.	.	1067
2.00-2.49	.	.	.	158	188	91	13	22	1	.	475
2.50-2.99	.	.	.	2	211	82	7	6	.	.	312
3.00-3.49	16	157	9	8	.	.	190
3.50-3.99	66	18	8	.	.	95
4.00-4.49	7	39	16	.	.	67
4.50-4.99	17	22	.	.	42
5.00-5.49	1	20	.	.	21
5.50-5.99	5	.	.	12
6.00-6.49	10	2	12
6.50-6.99	5	2	11
7.00+	4	4	6
TOTAL	393	3253	5464	2557	1065	846	296	163	55	15	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 13214.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	366	1502	117	1	1						1987
0.50-0.99		2077	2876	67	10	10	1				5041
1.00-1.49			1273	694	48	23	10				2051
1.50-1.99			150	552	167	18	16		1		907
2.00-2.49				1	175	38	4		2	2	397
2.50-2.99					164	55	2		1		227
3.00-3.49					9	124	1				137
3.50-3.99						50	1				57
4.00-4.49						4	1				1
4.50-4.99							2				
5.00-5.49									1		
5.50-5.99											
6.00-6.49											
6.50-6.99											
7.00+											0
TOTAL	366	3579	4417	1490	574	323	52	19	6	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 10142.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	236	1014	23	1							1274
0.50-0.99		1964	608	2							2574
1.00-1.49			513	18							531
1.50-1.99			208	36	6		1				251
2.00-2.49			4	32	6						42
2.50-2.99				3	4						8
3.00-3.49						7					7
3.50-3.99						3					3
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	236	2978	1356	92	16	11	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4392.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	175	472	9								656
0.50-0.99		1356	262								1518
1.00-1.49			381	4							385
1.50-1.99			140	12							152
2.00-2.49				9							9
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	175	1828	792	25	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2641.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	225	667	4								896
0.50-0.99		1366	229								1595
1.00-1.49			382								382
1.50-1.99			137	22							159
2.00-2.49			2	7							9
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	225	2033	754	30	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2850.

STATION S80 48.67N 86.65W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

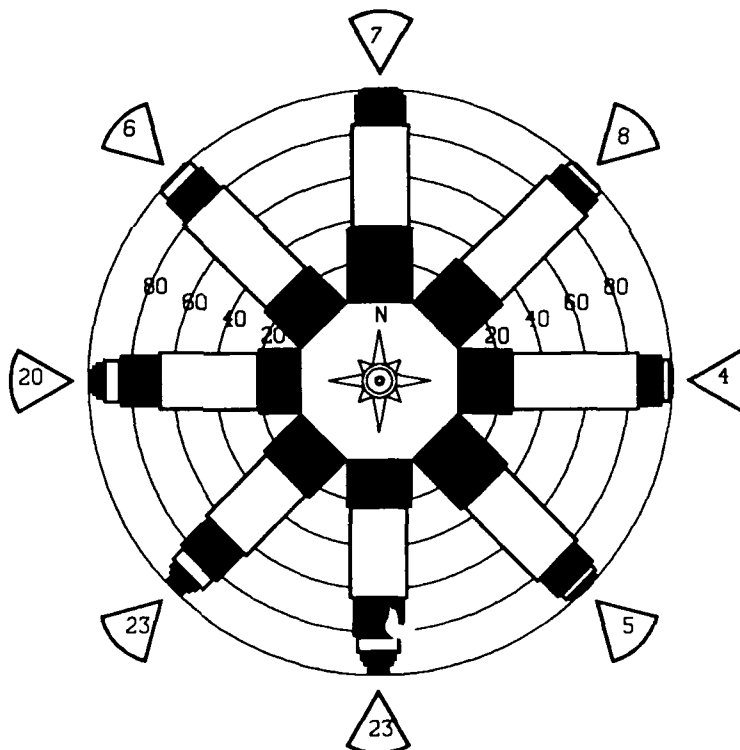
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	515	1469	393	70	17	2					2466
0.50-0.99		2070	2006	433	95	58	5				4667
1.00-1.49			862	461	167	64	21	4			1579
1.50-1.99			154	264	139	66	11	3			637
2.00-2.49				103	73	58	8	4			247
2.50-2.99					4	38	9	3			146
3.00-3.49						11	6				94
3.50-3.99							12	4			56
4.00-4.49						5	19	6	1		31
4.50-4.99							7	11	1		19
5.00-5.49								9	2		11
5.50-5.99								2	3		5
6.00-6.49									4		4
6.50-6.99									1		1
7.00+										1	1
TOTAL	515	3539	3416	1335	594	400	100	52	12	1	

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.

STATION 80
48.67N, 86.65 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S80 (48.67N 86.65W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1957	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.9	0.8	0.8	0.5	0.5	0.4	0.5	0.5	0.5	0.8	0.9	1.0	0.7
MEAN	1.0	0.9	0.9	0.7	0.7	0.6	0.5	0.6	1.0	1.2	1.2	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S80 (48.67N 86.65W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.4	2.7	3.1	1.6	1.9	1.9	1.1	1.3	1.7	3.3	2.0	1.8	
1957	2.2	2.9	2.5	2.1	2.4	3.0	1.2	1.6	1.9	1.7	2.4	2.6	
1958	2.2	2.4	2.0	1.1	1.8	2.0	1.3	1.5	2.1	2.3	2.4	2.7	
1959	3.5	4.5	2.3	2.2	3.4	1.9	1.8	1.6	2.2	1.9	2.6	2.7	
1960	1.1	1.8	2.2	1.2	1.4	1.4	1.1	2.7	1.8	2.0	2.8	3.7	
1961	2.2	2.1	2.4	2.2	1.7	2.3	1.2	2.3	1.8	2.2	4.5	2.6	
1962	2.2	1.1	1.8	1.5	1.5	1.1	1.1	1.2	1.7	4.0	3.3	4.8	
1963	3.5	3.5	3.1	2.2	2.7	2.8	2.6	1.2	2.7	3.3	2.8	4.0	
1964	3.5	3.7	3.4	3.0	3.5	2.4	1.7	3.3	4.4	6.0	4.2	3.7	
1965	3.3	3.7	3.7	3.0	3.0	3.0	2.7	2.0	3.1	3.1	4.4	3.0	
1966	3.3	3.7	3.7	3.0	3.0	3.0	2.7	2.0	3.1	3.1	4.4	3.0	
1967	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1968	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1969	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
1970	3.3	3.7	3.9	3.3	3.3	3.8	2.2	2.8	4.4	6.6	6.0	2.5	
1971	3.3	3.7	3.7	3.3	3.3	3.8	2.2	2.8	4.4	6.6	6.0	2.5	
1972	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1973	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1974	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1975	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1976	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1977	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1978	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1979	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1980	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1981	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1982	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1983	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1984	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1985	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1986	2.2	2.0	2.4	2.2	2.2	2.2	1.1	1.4	1.7	2.2	3.3	4.3	
1987	3.2	3.4	2.7	2.6	2.8	1.3	1.9	1.7	1.6	3.2	3.5	3.6	

32 YR. STATISTICS FOR WIS STATION S80

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	8.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	166.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		84110400

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	401	1361	29	.	1	.	.	.	.	.	1792
0.50-0.99	.	2050	229	.	3	.	.	.	.	.	2282
1.00-1.49	.	.	672	.	1	.	.	.	.	.	673
1.50-1.99	.	.	106	.	.	.	.	.	.	.	106
2.00-2.49	.	.	4	7	.	.	.	.	.	.	11
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	401	3411	1040	8	5	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4554.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	236	602	.	1	.	.	.	.	.	.	839
0.50-0.99	.	1254	278	1	.	2	.	.	.	.	1534
1.00-1.49	.	.	396	1	3	1	.	.	.	.	401
1.50-1.99	.	.	147	17	1	1	1	.	.	.	167
2.00-2.49	.	.	.	8	3	1	.	.	.	.	12
2.50-2.99	.	.	.	2	1	.	.	.	.	.	3
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	236	1856	821	29	8	5	1	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 2768.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	471	1072	8	.	.	.	.	.	.	.	1551
0.50-0.99	.	1941	327	.	.	2	.	.	.	.	2270
1.00-1.49	.	.	266	2	.	1	.	.	.	.	269
1.50-1.99	.	.	91	12	.	.	1	.	.	.	104
2.00-2.49	.	.	3	4	.	.	.	.	.	.	7
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	471	3013	695	18	0	3	1	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3933.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	245	574	5	.	.	.	.	.	.	.	824
0.50-0.99	.	1898	748	1	2	1	.	.	.	.	2650
1.00-1.49	.	.	651	2	1	2	.	.	.	.	656
1.50-1.99	.	.	209	68	3	1	.	.	.	.	281
2.00-2.49	.	.	1	42	1	.	.	.	.	.	44
2.50-2.99	.	.	.	3	2	.	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	245	2472	1614	116	8	5	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4176.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	274	451	5	.	.	.	.	.	.	.	730
0.50-0.99	.	448	696	.	1	.	.	.	.	.	1145
1.00-1.49	.	.	464	3	.	2	.	.	.	.	469
1.50-1.99	.	.	37	79	1	.	1	.	.	.	118
2.00-2.49	.	.	.	74	1	.	.	.	.	.	75
2.50-2.99	.	.	.	6	6	.	.	.	.	.	12
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	274	899	1202	162	10	2	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 2389.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	194	313	8	.	.	.	.	.	.	.	515
0.50-0.99	.	345	540	.	.	.	.	.	.	.	885
1.00-1.49	.	.	294	36	.	.	.	.	.	.	330
1.50-1.99	.	.	12	93	1	3	.	.	.	.	109
2.00-2.49	.	.	.	32	11	.	.	.	.	.	43
2.50-2.99	.	.	.	4	8	.	.	.	.	.	12
3.00-3.49	1	.	.	.	1
3.50-3.99	1	2	.	.	.	.	3
4.00-4.49	1	.	.	.	.	1
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	194	658	854	165	21	7	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 1782.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	221	407	49	16	5	.	.	.	.	.	698
0.50-0.99	.	444	632	28	47	8	.	.	.	.	1159
1.00-1.49	.	.	273	69	11	27	3	.	.	.	383
1.50-1.99	.	.	24	75	10	14	4	.	.	.	127
2.00-2.49	.	.	.	37	10	5	1	1	.	.	54
2.50-2.99	.	.	.	2	22	1	.	2	.	.	27
3.00-3.49	5	5	.	2	.	.	12
3.50-3.99	1	1	.	.	.	.	2
4.00-4.49	0
4.50-4.99	1	.	.	.	.	1
5.00-5.49	2	.	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	221	851	978	227	111	62	10	5	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 2318.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	341	929	553	241	48	.	.	.	.	.	2112
0.50-0.99	.	870	1932	478	262	90	.	.	.	.	3632
1.00-1.49	.	.	663	428	126	105	10	.	.	.	1332
1.50-1.99	.	.	62	334	121	54	7	.	.	.	578
2.00-2.49	.	.	.	269	82	53	5	2	.	.	411
2.50-2.99	.	.	.	31	195	29	5	6	.	.	266
3.00-3.49	40	117	3	3	.	.	166
3.50-3.99	3	82	16	1	.	.	102
4.00-4.49	1	39	36	16	.	.	82
4.50-4.99	1	36	18	.	.	55
5.00-5.49	6	26	.	.	33
5.50-5.99	12	7	.	19
6.00-6.49	6	7	1	13
6.50-6.99	1	4	5
7.00+	0
TOTAL	341	1799	3210	1781	878	570	127	80	22	5	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8262.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	389	1012	1225	145	12	1	.	.	.	.	2784
0.50-0.99	.	859	2778	2501	269	17	.	.	.	.	6424
1.00-1.49	.	1	498	987	1299	109	.	.	.	.	2894
1.50-1.99	.	.	37	248	473	548	2	.	.	.	1308
2.00-2.49	.	.	.	119	71	314	40	.	.	.	544
2.50-2.99	.	.	.	6	151	82	63	16	.	.	318
3.00-3.49	13	148	23	25	3	.	212
3.50-3.99	110	32	17	5	.	164
4.00-4.49	11	58	13	7	.	89
4.50-4.99	25	37	4	.	66
5.00-5.49	3	32	3	.	38
5.50-5.99	6	12	1	19
6.00-6.49	1	17	.	18
6.50-6.99	9	1	10
7.00+	3	5	8
TOTAL	389	1872	4538	4006	2288	1340	246	147	63	7	
MEAN HS(M) = 1.0	LARGEST HS(M)=	9.6	MEAN TP(SEC)=	5.2	NO. OF CASES=	13951.					

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	334	1018	478	52	10	4	.	.	.	.	1896
0.50-0.99	.	797	1720	456	112	25	.	.	.	.	3110
1.00-1.49	.	.	451	550	253	66	.	.	.	.	1320
1.50-1.99	.	.	40	283	237	132	5	.	.	.	697
2.00-2.49	.	.	1	121	89	140	16	.	.	.	367
2.50-2.99	.	.	.	5	143	65	23	7	.	.	243
3.00-3.49	16	121	20	19	1	.	177
3.50-3.99	1	84	13	8	1	.	107
4.00-4.49	10	43	10	1	.	64
4.50-4.99	24	13	2	.	39
5.00-5.49	1	21	5	.	27
5.50-5.99	8	4	.	12
6.00-6.49	1	10	.	11
6.50-6.99	5	1	6
7.00+	3	4	7
TOTAL	334	1815	2690	1467	861	647	145	87	32	5	
MEAN HS(M) = 1.1	LARGEST HS(M)=			9.3	MEAN TP(SEC)= 4.8			NO. OF CASES=		7581.	

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	362	1465	753	164	54	17	1	.	.	2816	
0.50-0.99	.	843	2527	516	276	202	20	2	.	4386	
1.00-1.49	.	.	706	664	186	186	50	12	.	1804	
1.50-1.99	.	.	47	336	207	112	28	7	1	738	
2.00-2.49	.	.	.	117	105	98	16	4	.	340	
2.50-2.99	.	.	.	6	142	63	13	6	7	237	
3.00-3.49	17	127	23	11	2	180	
3.50-3.99	77	28	6	1	112	
4.00-4.49	7	54	20	3	84	
4.50-4.99	23	23	2	49	
5.00-5.49	1	36	3	40	
5.50-5.99	3	7	10	
6.00-6.49	11	12	
6.50-6.99	7	10	
7.00+	1	7	
TOTAL	362	2308	4033	1803	987	889	257	130	45	11	
MEAN HS(M) = 1.0	LARGEST HS(M)=		7.6	MEAN TP(SEC)=		4.8	NO. OF CASES=		10146.		

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	399	1840	433	58	11	3	1				2745
0.50-0.99		1363	3495	454	101	143	22	2			5580
1.00-1.49			1222	974	134	109	102	22			2563
1.50-1.99			67	627	231	43	31	18			1019
2.00-2.49			1	177	185	47	9	11	3		433
2.50-2.99				4	232	44	7	5			292
3.00-3.49					19	121	4	3	1		148
3.50-3.99						60	11	3	2		76
4.00-4.49						6	26	9	2	1	44
4.50-4.99							11	13	5	2	30
5.00-5.49							2	5	2	2	14
5.50-5.99								4	3	3	6
6.00-6.49									5		5
6.50-6.99									2	6	8
7.00+											
TOTAL	399	3203	5218	2294	913	576	226	95	31	14	
MEAN HS(M) = 1.0	LARGEST HS(M)=		7.9	MEAN TP(SEC)=		4.5	NO. OF CASES=		12151.		

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	332	1410	68	32	3	6	2	.	.	.	1810
0.50-0.99	.	1990	2718	578	13	9	8	1	.	.	4751
1.00-1.49	.	.	1311	572	110	7	4	2	.	.	1921
1.50-1.99	.	.	162	9	176	10	3	4	1	2	857
2.00-2.49	.	.	.	195	204	28	.	.	.	.	400
2.50-2.99	.	.	.	3	8	115	.	.	.	2	235
3.00-3.49	47	1	.	.	.	123
3.50-3.99	5	3	.	.	.	48
4.00-4.49	4	.	.	.	6
4.50-4.99	3	.	2	.	4
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	332	3400	4268	1381	514	227	28	9	3	2	9518.

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 9518.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	203	909	18	.	.	1	.	.	.	.	1130
0.50-0.99	.	1938	566	.	.	.	.	.	.	.	2505
1.00-1.49	.	.	549	20	2	.	2	.	.	.	569
1.50-1.99	.	.	208	48	2	.	.	.	.	.	260
2.00-2.49	.	.	3	41	4	.	.	.	.	.	48
2.50-2.99	.	.	.	3	14	.	.	.	.	.	17
3.00-3.49	2	3	.	.	.	.	5
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	1
4.50-4.99	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	203	2847	1344	112	22	6	3	0	0	0	4249.

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4249.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	171	443	9	.	.	.	.	.	.	.	623
0.50-0.99	.	1276	220	.	.	.	.	.	.	.	1496
1.00-1.49	.	.	355	.	.	.	.	.	.	.	355
1.50-1.99	.	.	170	19	.	.	.	.	.	.	189
2.00-2.49	.	.	.	9	.	.	.	.	.	.	9
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	171	1719	754	28	0	0	0	0	0	0	2502.

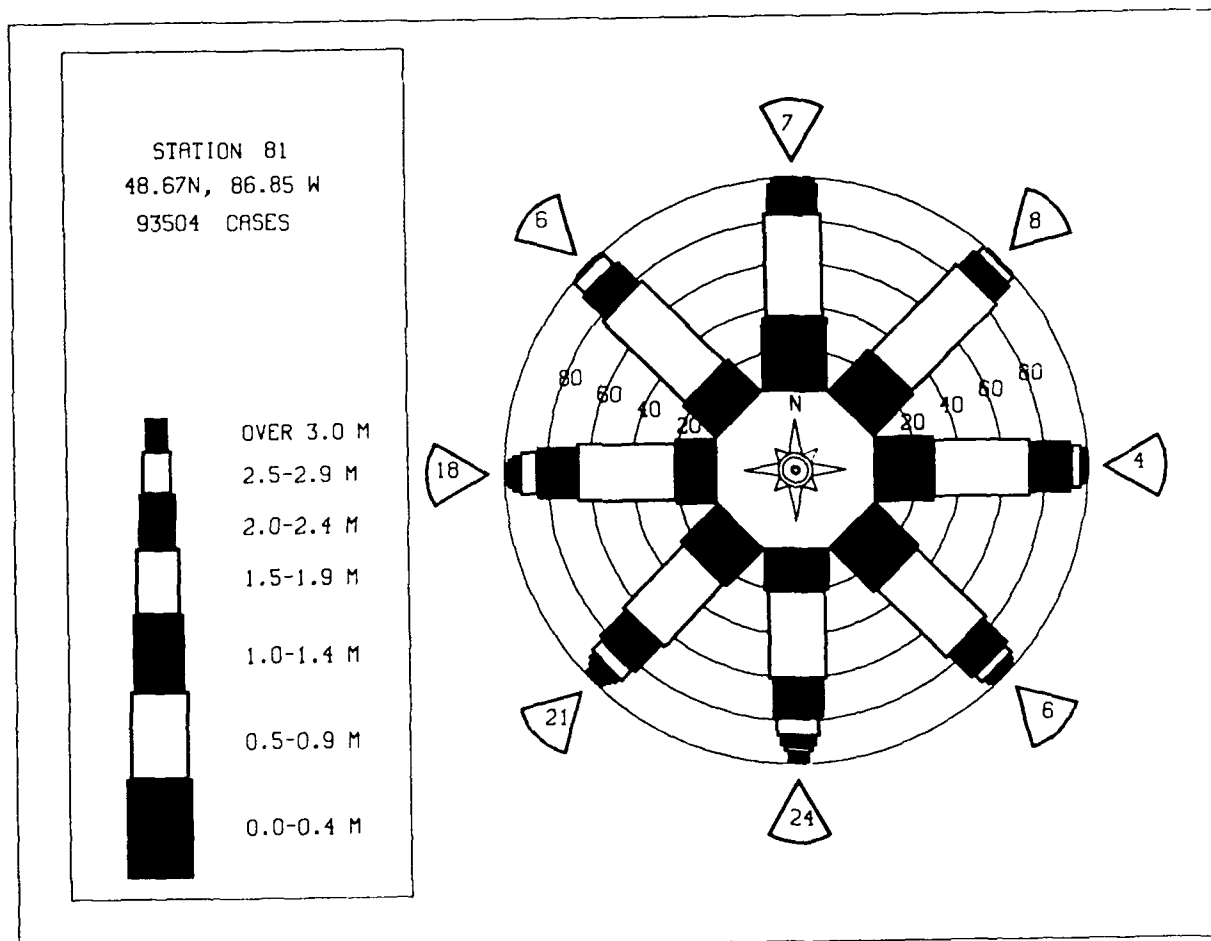
MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2502.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	176	662	6	.	.	.	.	.	.	.	844
0.50-0.99	.	1512	289	.	.	.	.	.	.	.	1801
1.00-1.49	.	.	515	.	.	.	.	.	.	.	515
1.50-1.99	.	.	212	38	.	.	.	.	.	.	250
2.00-2.49	.	.	2	27	.	.	.	.	.	.	29
2.50-2.99	.	.	.	4	.	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	176	2174	1024	69	0	0	0	0	0	0	3224.

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3224.

STATION S81 48.67N 86.85W FOR ALL DIRECTIONS										
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METRES)	PEAK PERIOD(SECONDS)									
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER
0.00-0.49	475	1447	365	68	14	2	4	.	.	2371
0.50-0.99	.	1983	1970	446	107	50	17	3	.	4560
1.00-1.49	.	.	929	431	203	62	8	.	.	1645
1.50-1.99	.	.	163	285	140	91	9	2	.	689
2.00-2.49	.	.	2	128	74	57	11	4	.	282
2.50-2.99	.	.	.	8	112	31	7	6	.	166
3.00-3.49	12	16	10	3	.	101
3.50-3.99	46	22	6	1	37
4.00-4.49	8	12	10	1	23
4.50-4.99	1	12	1	14
5.00-5.49	3	3	6
5.50-5.99	5	5
6.00-6.49	3	3
6.50-6.99	1	1
7.00+	2	2
TOTAL	475	3430	3429	1366	662	433	101	51	15	93504
MEAN HS(M)=	0.9	LARGEST HS(M)=	9.6	MEAN TP(SEC)=	4.2	TOTAL CASES=				



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S81 (48.67N 86.85W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1957	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1958	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1959	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1960	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1961	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1962	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1963	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1964	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1965	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1966	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1967	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1968	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1969	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1970	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1971	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1972	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1973	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1974	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1975	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1976	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1977	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1978	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1979	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1980	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1981	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1982	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1983	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1984	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1985	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1986	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
1987	0.5	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.9	0.7	0.6	0.6
MEAN	1.0	0.9	0.9	0.7	0.7	0.7	0.6	0.7	1.0	1.3	1.3	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S81 (48.67N 86.85W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.4	2.7	3.3	1.6	1.9	1.8	1.1	1.3	1.7	3.3	2.0	1.8	
1957	2.9	3.6	2.3	2.0	2.5	3.0	1.3	1.7	1.9	1.7	2.4	2.9	
1958	2.5	2.0	1.2	3.5	2.0	2.1	1.3	1.6	2.2	2.5	5.7	2.6	
1959	3.2	4.3	2.4	2.1	3.5	1.8	1.8	1.6	2.4	1.8	2.5	2.7	
1960	1.9	2.3	1.8	2.2	1.2	1.4	1.6	2.7	1.8	2.0	3.2	3.7	
1961	2.3	2.1	2.5	2.0	2.1	2.2	1.0	2.3	2.2	2.4	4.5	2.5	
1962	2.6	2.3	1.8	1.5	1.4	1.5	1.0	1.3	1.8	4.2	3.3	5.0	
1963	2.7	3.6	3.1	2.4	2.6	2.8	2.6	1.2	2.7	4.1	2.7	3.7	
1964	5.4	4.4	4.4	4.4	3.4	2.2	1.7	2.8	3.7	6.0	3.9	3.6	
1965	3.9	3.7	2.1	3.1	2.5	2.8	1.8	1.8	3.0	3.1	4.2	3.3	
1966	3.7	4.7	4.7	4.3	2.8	2.7	2.7	2.5	2.9	4.5	5.2	4.5	
1967	4.0	5.0	4.5	3.2	5.0	5.1	1.7	3.6	5.3	9.6	4.3	5.0	
1968	4.9	3.5	4.6	3.7	3.4	2.5	3.0	3.0	4.3	5.3	5.9	4.3	
1969	4.1	3.7	3.1	2.7	4.1	3.6	2.1	3.5	4.5	7.0	6.7	2.9	
1970	3.7	3.7	3.3	3.2	4.5	2.9	1.7	2.4	5.7	7.3	7.4	3.4	
1971	3.2	4.7	3.6	2.7	2.0	2.7	2.8	1.6	5.0	7.9	7.2	4.0	
1972	4.0	4.6	2.6	2.3	1.2	1.2	1.8	2.3	5.7	5.6	6.7	2.7	
1973	2.8	3.7	4.6	2.6	2.7	2.9	2.1	2.1	4.0	4.7	5.9	5.3	
1974	3.9	2.7	2.9	2.7	3.6	3.9	1.8	4.0	3.7	5.4	6.6	3.6	
1975	4.2	2.1	2.0	0.9	1.9	3.0	1.7	4.0	5.2	7.3	7.3	3.6	
1976	4.0	3.8	3.3	3.0	2.1	2.1	1.2	2.3	2.8	3.2	3.6	4.5	
1977	3.9	3.4	3.3	1.3	1.6	1.3	1.7	2.2	4.9	3.2	7.5	2.9	
1978	2.6	1.8	3.6	2.6	1.8	1.8	1.5	2.0	2.9	4.0	3.9	4.8	
1979	2.8	2.3	2.4	2.0	5.0	4.5	1.2	3.4	3.3	5.2	6.9	3.9	
1980	4.4	2.8	3.3	1.4	3.0	2.7	2.3	4.1	7.5	6.9	5.3	4.0	
1981	2.5	2.2	3.1	2.6	2.0	3.8	1.2	1.7	6.6	5.7	5.7	3.6	
1982	4.0	3.0	6.2	3.9	4.5	3.9	2.4	2.8	4.0	6.4	7.7	4.6	
1983	4.3	5.0	2.3	2.4	2.2	2.6	3.4	2.7	4.6	6.2	5.7	3.7	
1984	4.6	2.4	3.8	4.3	2.8	3.6	1.4	3.2	6.5	7.0	8.3	4.6	
1985	3.5	3.5	4.1	1.9	2.6	3.9	2.7	3.1	6.5	6.7	4.6	4.0	
1986	4.2	1.7	4.2	2.4	1.7	1.6	1.7	3.3	4.2	7.3	7.6	3.7	
1987	3.3	3.2	2.6	2.9	2.8	1.3	1.9	1.7	1.6	3.1	3.5	3.6	

32 YR. STATISTICS FOR WIS STATION S81

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.5
LARGEST WAVE HS (METERS)	9.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	184.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67102300

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	382	1382	39	4	1						1808
0.50-0.99		1987	221		9	1					2218
1.00-1.49			640	1	1	1					643
1.50-1.99			101	1			1				103
2.00-2.49			3	7							10
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	382	3369	1004	14	11	2	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4478.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	278	632	11								921
0.50-0.99		1199	248	2	1	4					1454
1.00-1.49			390	4	3	1					398
1.50-1.99			98	9	1	2					110
2.00-2.49			1	10							11
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	278	1831	748	27	5	7	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2713.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	375	974	18		1						1368
0.50-0.99		1629	352	11	8	4					2004
1.00-1.49			263	9	4	4					280
1.50-1.99			86	11		1	1				99
2.00-2.49			2	6	1	2					11
2.50-2.99				1	1						2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	375	2603	721	38	15	11	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3527.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	271	755	12	1							1039
0.50-0.99		2007	820	6	2	1					2836
1.00-1.49			587	36	4	6					633
1.50-1.99			196	89	1	3	1				290
2.00-2.49			1	41	7						49
2.50-2.99					23						23
3.00-3.49					4	4					8
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	271	2762	1616	173	41	14	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4569.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	238	525	7	3	4	.	.	.	.	.	770
0.50-0.99	.	536	921	122	3	4	.	.	.	.	1464
1.00-1.49	.	.	386	207	16	1	1	.	.	.	515
1.50-1.99	.	.	17	75	9	4	1	.	.	.	238
2.00-2.49	.	.	.	2	57	7	.	.	.	.	93
2.50-2.99	9	2	.	.	.	.	59
3.00-3.49	2	.	.	.	.	16
3.50-3.99	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	238	1061	1331	409	98	20	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 2963.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	217	387	8	2	1	.	.	.	.	.	612
0.50-0.99	.	393	730	135	11	7	.	.	.	.	1126
1.00-1.49	.	.	283	131	11	13	.	.	.	.	420
1.50-1.99	.	.	9	51	17	5	.	.	.	.	158
2.00-2.49	.	.	.	2	37	2	.	1	.	.	81
2.50-2.99	7	9	.	.	.	.	45
3.00-3.49	2	.	.	.	.	16
3.50-3.99	1	.	.	.	.	3
4.00-4.49	1	2	.	.	2
4.50-4.99	1	.	.	.	2
5.00-5.49	1
5.50-5.99	2	.	.	3
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	217	780	1030	321	75	37	3	5	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2319.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	193	478	120	67	10	.	.	.	.	.	868
0.50-0.99	.	435	919	109	98	16	.	.	.	.	1577
1.00-1.49	.	.	267	198	29	39	5	.	.	.	538
1.50-1.99	.	.	18	99	25	13	.	.	.	.	155
2.00-2.49	.	.	.	50	17	10	.	.	1	.	79
2.50-2.99	24	6	1	.	.	.	34
3.00-3.49	5	9	1	.	.	.	18
3.50-3.99	7	.	.	.	.	8
4.00-4.49	1	3	.	.	.	4
4.50-4.99	1	1	.	.	.	2
5.00-5.49	1	.	.	0
5.50-5.99	1
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	193	913	1324	523	208	102	13	7	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 3085.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	327	1203	790	158	5	.	.	.	.	.	2483
0.50-0.99	.	804	2614	808	217	38	1	.	.	.	4482
1.00-1.49	.	.	529	702	259	105	8	.	.	.	1603
1.50-1.99	.	.	44	337	231	97	9	1	.	.	719
2.00-2.49	.	.	.	163	115	104	9	1	.	.	392
2.50-2.99	.	.	.	5	240	56	12	7	.	.	320
3.00-3.49	33	210	9	.	.	.	252
3.50-3.99	152	22	3	.	.	177
4.00-4.49	26	96	8	1	.	131
4.50-4.99	60	42	1	.	103
5.00-5.49	54	2	.	59
5.50-5.99	32	14	1	47
6.00-6.49	4	17	.	21
6.50-6.99	28	3	31
7.00+	10	11	21
TOTAL	327	2007	3977	2173	1100	788	229	152	73	15	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 10162.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	423	1208	1157	115	6						2909
0.50-0.99		807	2730	2084	87	8					5716
1.00-1.49			376	1027	847	37					2287
1.50-1.99				192	385	225					838
2.00-2.49			36	90	70	202	17				379
2.50-2.99				4	126	66	31	8			235
3.00-3.49					7	127	24	14	1		173
3.50-3.99						81	24	9	1		115
4.00-4.49						8	62	12	3		85
4.50-4.99							13	32	4		49
5.00-5.49								28	3		31
5.50-5.99								9	5		14
6.00-6.49								1	13		14
6.50-6.99									9	8	9
7.00+									3		11
TOTAL	423	2015	4299	3512	1528	754	171	113	42	8	

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 12050.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	386	1143	560	73	8						2170
0.50-0.99		817	1563	481	101	21	1				2984
1.00-1.49			454	424	196	31	1				1106
1.50-1.99			39	253	182	53	1				528
2.00-2.49				88	71	81	8				248
2.50-2.99				2	111	45	9	3			170
3.00-3.49					10	72	17	12			105
3.50-3.99						53	17	5			75
4.00-4.49						5	23	10	1		39
4.50-4.99							8	11	3		22
5.00-5.49								12	1		15
5.50-5.99								6	2		8
6.00-6.49								1	4		5
6.50-6.99									3		3
7.00+									1	1	2
TOTAL	386	1960	2616	1321	679	361	81	60	15	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 7015.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	466	1778	740	145	68	18	1				3216
0.50-0.99		1069	2602	444	179	170	21	4			4489
1.00-1.49			763	629	120	111	45	3			1671
1.50-1.99			51	393	137	65	6	3			655
2.00-2.49				152	113	71	6	4	2		348
2.50-2.99				4	156	39	13	7	3		222
3.00-3.49					20	113	8	10	2	1	154
3.50-3.99					1	83	17	9			110
4.00-4.49						7	42	16	3		68
4.50-4.99							21	17	3	1	42
5.00-5.49							2	19	6		27
5.50-5.99								9	6		15
6.00-6.49									11	3	14
6.50-6.99									4	3	7
7.00+									2	11	13
TOTAL	466	2847	4156	1767	794	677	182	101	42	19	

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 10358.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	505	1977	251	31	2	3					2769
0.50-0.99		1564	3231	191	24	57	25				4092
1.00-1.49			1564	474	28	23	28				2122
1.50-1.99			96	712	52	20	6	4	1		891
2.00-2.49				332	86	14	2	4	1		439
2.50-2.99				6	174	4	1				185
3.00-3.49					34	39	1				78
3.50-3.99						22	2	1	1	2	28
4.00-4.49						7	5	2	2	1	18
4.50-4.99						1	1	2	1		5
5.00-5.49								4	1	1	6
5.50-5.99								1	1		2
6.00-6.49									1		0
6.50-6.99									3		3
7.00+										2	2
TOTAL	505	3541	5142	1746	400	190	71	28	11	6	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 10903.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	396	1424	19								1839
0.50-0.99		1852	2325	3	3	1	2				4186
1.00-1.49			1542	226	4	2	3				1777
1.50-1.99			175	656	5	2		1			839
2.00-2.49			1	350	86	1					438
2.50-2.99				6	192	1					199
3.00-3.49					37	28					65
3.50-3.99						8					8
4.00-4.49						3					3
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	396	3276	4062	1241	327	44	7	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 8756.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	276	935	6								1217
0.50-0.99		1874	599								2473
1.00-1.49			597	10							607
1.50-1.99			249	47							296
2.00-2.49			3	49	4						56
2.50-2.99				1	9						10
3.00-3.49					2	2					4
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	276	2809	1454	107	15	2	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 4367.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	186	491	9	1							687
0.50-0.99		1131	259								1390
1.00-1.49			373	1							374
1.50-1.99			216	20							236
2.00-2.49				17							17
2.50-2.99				2							2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	186	1622	857	41	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 2534.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	227	700	10	1							938
0.50-0.99		1640	370								2010
1.00-1.49			634	1	1						636
1.50-1.99			295	41							336
2.00-2.49			1	32							33
2.50-2.99				5							5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	227	2340	1310	80	1	0	0	0	0	0	

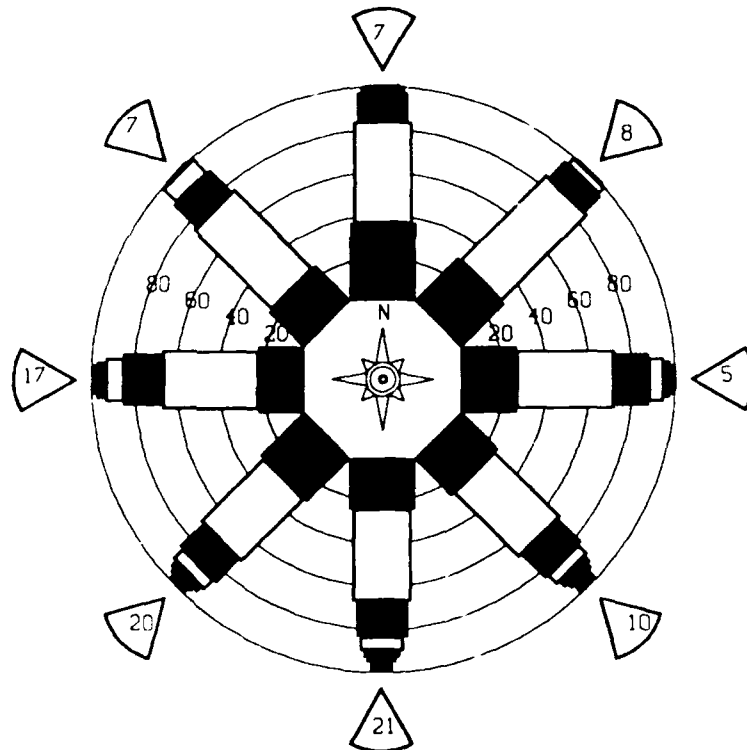
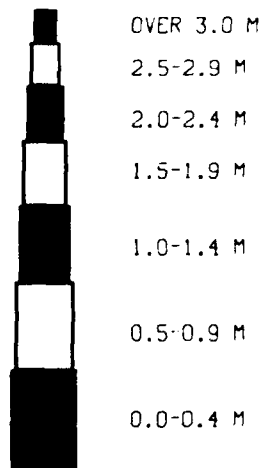
MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3705.

STATION S82 48.67N 87.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	515	1599	376	59	10	2	.	.	.	.	2561
0.50-0.99	.	1975	2051	414	73	32	.	.	.	.	4550
1.00-1.49	.	.	965	400	150	36	19	.	.	.	1560
1.50-1.99	.	.	173	320	104	49	22	.	.	.	648
2.00-2.49	.	.	1	152	60	50	4	.	.	.	267
2.50-2.99	.	.	.	4	115	22	6	3	.	.	150
3.00-3.49	17	62	5	4	.	.	88
3.50-3.99	41	8	2	.	.	51
4.00-4.49	6	23	2	1	.	35
4.50-4.99	10	10	1	.	21
5.00-5.49	11	1	.	12
5.50-5.99	5	2	.	7
6.00-6.49	4	.	4
6.50-6.99	5	.	5
7.00+	1	.	4
TOTAL	515	3574	3566	1349	529	300	72	40	15	3	93504

MEAN HS(M)= 0.9 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.

STATION 82
48.67N, 87.28 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S82 (48.67N 87.28W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.0	0.5	0.0	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.7	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.0	0.9	0.9	0.7	0.7	0.6	0.5	0.6	1.0	1.3	1.3	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S82 (48.67N 87.28W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.6	3.3	1.3	3.4	1.1	0.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

32 YR. STATISTICS FOR WIS STATION S82

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.4
LARGEST WAVE HS (METERS)	9.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	176.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67102300

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	381	1352	58	4	3						1798
0.50-0.99		1887	236	6	6	2					2137
1.00-1.49			625	3	1	3					632
1.50-1.99			118	4		1	1				124
2.00-2.49			3	7	1						11
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	381	3239	1040	24	11	6	1	0	0	0	
MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4404.											

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	273	696	23								992
0.50-0.99		1118	300	10	14	5	.	.	.	.	1447
1.00-1.49			336	10	8	3	.	.	.	.	357
1.50-1.99			81	7	1		1	.	.	.	90
2.00-2.49			2	7		1		.	.	.	10
2.50-2.99				2				.	.	.	2
3.00-3.49								.	.	.	0
3.50-3.99								.	.	.	0
4.00-4.49								.	.	.	0
4.50-4.99								.	.	.	0
5.00-5.49								.	.	.	0
5.50-5.99								.	.	.	0
6.00-6.49								.	.	.	0
6.50-6.99								.	.	.	0
7.00+								.	.	.	0
TOTAL	273	1814	742	36	23	9	1	0	0	0	0
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.6		MEAN TP(SEC)= 3.3		NO. OF CASES= 2718.						

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	375	887	28	3	2						1295
0.50-0.99		1436	347	14	14	3					1814
1.00-1.49			223	29	6						262
1.50-1.99			81	17	1	3					102
2.00-2.49			2	5	3						10
2.50-2.99					3	2					5
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	375	2323	681	68	27	14	0	0	0	0	
MEAN HS(M) = 0.6	LARGEST HS(M)= 2.8		MEAN TP(SEC)= 3.2		NO. OF CASES= 3270.						

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	301	851	18	1	.	.	.	.	.	.	1171
0.50-0.99	.	2073	886	10	9	.	.	.	.	.	2978
1.00-1.49	.	.	588	55	5	3	1	.	.	.	652
1.50-1.99	.	.	183	90	8	6	.	.	.	.	287
2.00-2.49	.	.	1	37	14	1	.	.	.	.	53
2.50-2.99	27	1	.	.	.	.	28
3.00-3.49	2	9	.	.	.	.	11
3.50-3.99	4	.	.	.	.	4
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	301	2924	1676	193	65	24	1	0	0	0	
MEAN HS(M) = 0.7	LARGEST HS(M)=		3.7	MEAN TP(SEC)=		3.5	NO. OF CASES=		4858.		

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	262	602	12	12	3	.	.	.	.	.	876
0.50-0.99	.	58	1056	202	6	.	.	.	.	.	1659
1.00-1.49	.	.	366	204	12	4	.	.	.	.	578
1.50-1.99	.	.	23	97	23	2	.	.	.	.	243
2.00-2.49	26	2	2	.	.	.	124
2.50-2.99	5	12	.	.	.	.	73
3.00-3.49	1	.	.	.	.	31
3.50-3.99	12
4.00-4.49	2
4.50-4.99	2	.	.	.	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	262	1190	1457	515	116	55	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 3375.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	206	471	14	4	1	.	.	.	.	.	691
0.50-0.99	.	439	795	174	6	2	.	.	.	.	1239
1.00-1.49	.	.	252	131	20	12	.	.	.	.	434
1.50-1.99	.	.	10	51	26	13	.	.	.	.	173
2.00-2.49	.	.	.	1	43	7	.	2	.	.	90
2.50-2.99	2	19	.	1	.	.	53
3.00-3.49	9	3	1	.	.	22
3.50-3.99	1	.	12
4.00-4.49	1	1	1	.	2
4.50-4.99	1	.	.	2
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	1
6.00-6.49	3	.	0
6.50-6.99	1	4
7.00+	1	1
TOTAL	206	910	1071	361	98	62	4	7	4	2	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 2560.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	204	645	251	105	7	.	.	.	.	.	1212
0.50-0.99	.	452	1238	244	144	22	.	.	.	.	2100
1.00-1.49	.	.	304	239	35	66	4	.	.	.	648
1.50-1.99	.	.	27	144	41	21	.	.	.	.	233
2.00-2.49	.	.	.	49	28	13	5	1	.	.	96
2.50-2.99	.	.	.	1	26	10	2	6	.	.	45
3.00-3.49	2	13	1	3	.	.	19
3.50-3.99	5	2	.	.	.	7
4.00-4.49	3	1	.	.	.	4
4.50-4.99	1	2	1	.	.	4
5.00-5.49	0
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	204	1097	1820	782	283	154	17	12	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 4101.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	368	1538	1084	93	1	.	.	.	.	.	3084
0.50-0.99	.	855	3253	996	141	6	.	.	.	.	5251
1.00-1.49	.	.	472	853	326	85	7	1	.	.	1744
1.50-1.99	.	.	39	311	279	106	6	.	.	.	741
2.00-2.49	.	.	.	155	104	126	8	1	.	.	394
2.50-2.99	.	.	.	4	219	63	17	1	.	.	304
3.00-3.49	23	220	12	2	.	.	257
3.50-3.99	155	34	7	.	.	196
4.00-4.49	17	116	10	1	.	144
4.50-4.99	44	53	1	.	98
5.00-5.49	4	65	3	.	72
5.50-5.99	22	18	1	41
6.00-6.49	4	33	.	37
6.50-6.99	24	3	27
7.00+	6	26	28
TOTAL	368	2393	4848	2412	1093	778	248	166	86	22	

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 11631.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	468	1328	916	72	4	3	1	.	.	.	2788
0.50-0.99	.	740	2184	1049	51	3	3	.	.	.	4028
1.00-1.49	.	.	348	787	353	24	3	.	.	.	1515
1.50-1.99	.	.	32	165	253	109	1	.	.	.	560
2.00-2.49	.	.	.	73	72	116	10	1	.	.	272
2.50-2.99	.	.	.	5	118	31	18	9	.	.	182
3.00-3.49	12	117	13	8	.	.	150
3.50-3.99	64	17	9	1	.	91
4.00-4.49	9	43	9	.	.	61
4.50-4.99	1	18	25	.	.	44
5.00-5.49	27	.	.	27
5.50-5.99	10	5	.	15
6.00-6.49	1	10	.	11
6.50-6.99	5	1	6
7.00+	3	7	10
TOTAL	468	2068	3480	2151	864	474	124	99	24	8	

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 9148.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	426	1309	588	124	14	4	.	.	.	.	2465
0.50-0.99	.	735	1534	428	115	20	3	1	.	.	2836
1.00-1.49	.	.	460	393	129	27	3	1	.	.	1013
1.50-1.99	.	.	34	254	115	35	.	.	.	.	438
2.00-2.49	.	.	1	88	32	56	3	.	.	.	200
2.50-2.99	.	.	.	5	97	41	7	4	.	.	154
3.00-3.49	10	59	5	3	1	.	78
3.50-3.99	49	11	5	.	.	65
4.00-4.49	3	12	5	.	.	39
4.50-4.99	24	12	1	.	17
5.00-5.49	11	5	.	.	5
5.50-5.99	4	2	.	6
6.00-6.49	1	3	.	4
6.50-6.99	1	.	1
7.00+	1	1	1
TOTAL	426	2044	2617	1292	532	294	67	41	8	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 6867.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	609	2169	843	118	68	18	2	.	.	.	3827
0.50-0.99	.	1057	2766	361	119	135	34	2	.	.	4474
1.00-1.49	.	.	934	472	79	68	26	2	.	.	1581
1.50-1.99	.	.	98	397	105	50	6	4	1	.	661
2.00-2.49	.	.	.	183	89	40	10	5	3	.	330
2.50-2.99	.	.	.	6	155	25	7	10	2	.	205
3.00-3.49	26	94	5	4	1	.	130
3.50-3.99	1	51	12	5	1	1	71
4.00-4.49	10	27	13	3	.	53
4.50-4.99	20	14	2	.	36
5.00-5.49	1	17	6	.	24
5.50-5.99	8	7	1	16
6.00-6.49	1	7	4	12
6.50-6.99	5	5	10
7.00+	1	7	8
TOTAL	609	3226	4641	1537	642	491	150	85	39	18	

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 10724.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	627	1988	155	32	2	3	.	.	.	.	2807
0.50-0.99	.	1713	2854	91	8	18	10	.	.	.	4694
1.00-1.49	.	1	1919	150	12	10	5	3	.	.	2100
1.50-1.99	.	.	182	586	17	4	.	.	.	.	789
2.00-2.49	.	.	2	353	19	13	1	1	.	.	389
2.50-2.99	.	.	.	32	19	2	3	1	1	.	118
3.00-3.49	22	9	2	1	.	.	34
3.50-3.99	2	13	.	.	.	.	15
4.00-4.49	3	2	.	1	.	8
4.50-4.99	1	.	2	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	1	1
TOTAL	627	3702	5112	1244	161	76	23	8	2	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 10259.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	529	1332	19	.	1	.	.	.	.	.	1880
0.50-0.99	.	1872	1858	.	36	1	.	.	.	.	3731
1.00-1.49	.	.	1489	36	1	.	.	.	.	.	1526
1.50-1.99	.	.	205	599	2	1	.	.	.	.	806
2.00-2.49	.	.	11	419	1	2	.	.	.	.	433
2.50-2.99	.	.	.	26	84	.	.	.	.	.	110
3.00-3.49	25	.	.	.	.	.	25
3.50-3.99	1	1	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	529	3204	3582	1080	114	4	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 7968.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	314	913	9	.	1	.	.	.	.	.	1236
0.50-0.99	.	1839	624	.	1	.	.	.	.	.	2464
1.00-1.49	.	.	741	3	.	.	.	.	.	.	744
1.50-1.99	.	.	311	77	.	.	.	.	.	.	388
2.00-2.49	.	.	4	72	2	.	.	.	.	.	78
2.50-2.99	.	.	.	7	2	.	.	.	.	.	9
3.00-3.49	4	1	.	.	.	.	5
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	314	2752	1689	159	9	1	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4609.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	206	544	5	.	.	.	.	.	.	.	755
0.50-0.99	.	1099	315	.	.	.	.	.	.	.	1414
1.00-1.49	.	.	438	1	.	1	.	.	.	.	440
1.50-1.99	.	.	270	32	.	.	.	.	.	.	302
2.00-2.49	.	.	.	17	.	.	.	.	.	.	17
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	206	1643	1028	51	0	1	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 2742.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

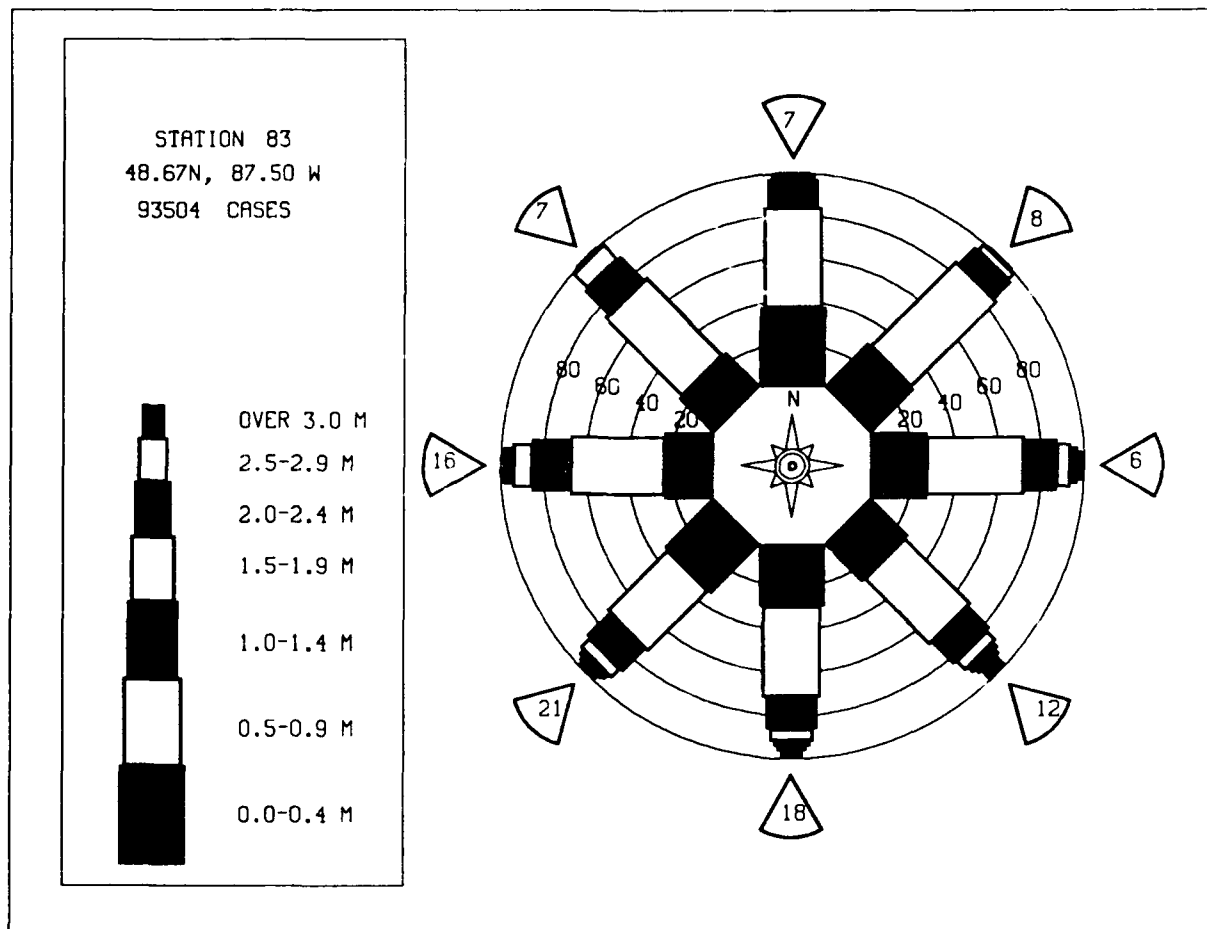
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	265	793	16	1	1	.	.	.	.	.	1076
0.50-0.99	.	1856	503	1	3	1	.	.	.	.	2364
1.00-1.49	.	.	733	2	3	.	.	.	.	.	738
1.50-1.99	.	.	308	37	.	.	.	.	.	.	345
2.00-2.49	.	.	3	31	.	.	.	.	.	.	34
2.50-2.99	.	.	.	5	.	.	.	.	.	.	5
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	265	2649	1563	77	7	1	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 4270.

STATION S83 48.67N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	582	1742	404	55	10	2	.	.	.	.	2795
0.50-0.99	.	1976	2075	323	63	21	4	.	.	.	4462
1.00-1.49	.	.	1023	341	97	30	5	.	.	.	1496
1.50-1.99	.	.	200	306	85	35	1	.	.	.	627
2.00-2.49	.	.	3	165	44	38	4	.	.	.	254
2.50-2.99	.	.	.	9	92	19	5	3	.	.	178
3.00-3.49	13	57	4	2	.	.	76
3.50-3.99	36	8	2	.	.	46
4.00-4.49	4	21	5	.	.	30
4.50-4.99	10	10	.	.	20
5.00-5.49	11	.	.	11
5.50-5.99	4	.	.	7
6.00-6.49	3	.	5
6.50-6.99	1	.	4
7.00+	3	1	5
TOTAL	582	3718	3705	1199	404	242	62	37	12	5	

MEAN HS(M)= 0.8 LARGEST HS(M)= 9.5 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S83 (48.67N 87.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.8	0.7	0.6	0.6
1957	0.0	0.8	0.6	0.0	0.6	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1987	0.9	0.8	0.9	0.5	0.5	0.3	0.4	0.5	0.5	0.8	0.9	0.9	0.7
MEAN	0.9	0.9	0.9	0.7	0.7	0.6	0.5	0.6	1.0	1.2	1.2	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S83 (48.67N 87.50W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	2.4	3.5	1.8	2.3	1.3	1.2	1.1	1.4	2.5	2.3	1.9	
1957	2.7	3.0	1.8	1.7	2.3	2.3	1.5	1.5	1.6	1.5	2.0	2.5	
1958	2.6	2.0	1.3	2.7	2.1	2.3	1.5	1.7	2.1	2.0	2.2	2.4	
1959	2.3	3.8	2.1	2.3	2.7	1.5	1.9	1.7	2.5	1.7	2.3	3.0	
1960	2.0	1.8	1.4	2.3	1.2	1.3	1.5	2.6	1.7	2.2	2.8	3.7	
1961	1.1	1.8	2.1	2.0	1.9	1.9	1.1	1.8	1.9	2.1	4.1	2.1	
1962	2.5	1.5	1.7	1.6	1.3	1.3	1.1	1.3	2.0	4.3	3.1	3.8	
1963	2.6	2.9	2.6	2.2	2.4	1.8	1.8	1.2	2.2	3.4	2.4	3.4	
1964	4.9	4.0	3.4	4.1	3.5	1.7	1.3	2.9	3.2	4.5	2.9	2.7	
1965	3.3	3.7	2.5	2.4	2.5	2.1	1.3	1.5	2.9	2.9	4.2	3.2	
1966	3.9	4.0	4.8	4.2	2.3	2.2	2.3	2.0	2.3	5.3	4.2	4.2	
1967	5.0	3.8	4.1	3.2	5.7	5.8	1.9	3.8	5.5	9.5	4.5	4.7	
1968	5.0	3.0	3.4	2.9	3.6	2.5	3.5	2.9	4.5	8.0	6.4	3.8	
1969	3.5	2.6	2.4	2.2	4.3	3.8	2.5	3.6	4.3	6.7	6.7	3.0	
1970	2.4	2.4	4.7	3.1	4.9	3.0	1.7	3.1	6.2	7.6	7.4	2.7	
1971	2.5	3.5	2.8	2.5	2.0	2.8	3.1	2.1	4.8	8.1	7.9	2.9	
1972	3.8	3.6	2.7	2.5	1.2	1.2	1.8	2.5	6.2	5.0	4.9	2.7	
1973	2.3	3.2	3.2	2.2	3.3	3.7	2.3	2.6	5.4	5.3	5.7	4.4	
1974	3.7	1.9	2.9	2.9	4.0	4.1	1.8	3.6	3.6	5.1	7.4	2.5	
1975	3.2	1.5	1.7	0.6	1.8	2.5	1.4	3.6	5.5	6.7	7.5	2.8	
1976	3.1	3.4	3.2	2.3	2.1	1.8	1.4	1.7	2.7	3.3	2.6	3.5	
1977	3.1	3.4	3.1	1.7	1.8	1.5	2.0	1.9	5.1	2.5	7.5	3.7	
1978	2.3	1.8	3.4	2.2	1.5	2.0	1.1	1.6	2.4	3.5	3.9	4.5	
1979	2.6	2.4	1.9	3.1	5.1	5.4	2.1	3.7	3.8	5.6	8.1	3.7	
1980	3.3	2.0	3.6	1.5	3.3	2.8	2.1	4.4	6.5	7.9	5.3	4.1	
1981	2.2	2.1	2.7	2.3	2.2	3.8	1.2	1.7	6.4	6.1	5.5	2.8	
1982	3.7	2.3	6.9	2.9	4.7	4.4	2.3	2.7	4.6	6.1	7.2	4.1	
1983	4.4	4.7	3.6	2.0	2.2	3.0	3.3	2.5	4.4	6.4	6.1	3.5	
1984	4.1	3.0	3.9	4.3	3.0	3.5	1.4	3.2	6.9	7.6	8.4	3.6	
1985	2.5	3.2	4.5	2.0	3.0	4.1	2.6	3.5	5.8	7.0	5.7	3.2	
1986	4.3	2.8	4.4	2.4	1.7	1.8	1.6	3.1	4.3	7.1	7.7	3.5	
1987	2.9	3.2	3.0	2.0	2.7	1.2	1.7	1.7	1.6	2.9	3.6	3.3	

32 YR. STATISTICS FOR WIS STATION S83

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	157.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	9.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	170.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	67102300

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	346	1193	55	6	5						1605
0.50-0.99		1727	274	20	12	3					2036
1.00-1.49			587	6	4	6					603
1.50-1.99			117	4		4					125
2.00-2.49			2	8		1					11
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	346	2920	1035	44	21	14	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4103.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	274	720	49	6							1049
0.50-0.99		1055	309	12	21	3					1400
1.00-1.49			320	20	10	9					359
1.50-1.99			84	10	1	6					101
2.00-2.49			3	8		2					14
2.50-2.99				2	1						2
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	274	1775	765	58	33	20	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 2744.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	420	849	54	5							1328
0.50-0.99		1241	377	22	8	3					1651
1.00-1.49			228	45	10	5					288
1.50-1.99			82	13	5	4					105
2.00-2.49			3	7	8	1					19
2.50-2.99				2	2	3					7
3.00-3.49						2					2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	420	2090	744	94	33	17	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 3189.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	344	797	34	4							1179
0.50-0.99		2071	868	23	12	1					2975
1.00-1.49			599	52	4	5					660
1.50-1.99			167	91	13	5					276
2.00-2.49				36	8	5					49
2.50-2.99				1	31	4					36
3.00-3.49					2	13					15
3.50-3.99						6					6
4.00-4.49						2	1				3
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	344	2868	1668	207	70	41	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 4873.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	342	792	28	2	6	.	.	.	.	.	1164
0.50-0.99	.	667	1223	13	16	5	.	.	.	.	1911
1.00-1.49	.	.	423	226	16	4	.	.	.	.	672
1.50-1.99	.	.	21	248	19	7	.	.	.	.	292
2.00-2.49	.	.	.	104	43	6	.	.	.	.	153
2.50-2.99	.	.	.	1	71	7	1	1	.	.	81
3.00-3.49	49	.	.	.	.	56
3.50-3.99	18	.	.	.	.	18
4.00-4.49	7	.	.	.	.	7
4.50-4.99	2	.	.	.	2
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	342	1459	1699	594	162	96	4	1	0	0	4085

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4085.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	271	560	22	1	1	.	.	.	.	.	855
0.50-0.99	.	470	838	5	2	.	.	.	.	.	1315
1.00-1.49	.	.	280	175	9	1	.	.	.	.	465
1.50-1.99	.	.	13	145	26	10	.	.	.	.	194
2.00-2.49	.	.	.	53	25	13	.	.	.	.	91
2.50-2.99	.	.	.	2	57	13	2	2	.	.	76
3.00-3.49	4	31	1	.	.	.	36
3.50-3.99	13	2	.	.	.	15
4.00-4.49	4	3	1	.	.	8
4.50-4.99	1	1	.	.	2
5.00-5.49	1	.	.	1
5.50-5.99	1	.	.	1
6.00-6.49	1	.	1
6.50-6.99	4	.	4
7.00+	0
TOTAL	271	1030	1153	381	124	85	9	6	5	0	2878

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 2878.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	270	911	490	120	3	.	.	.	.	.	1794
0.50-0.99	.	539	1819	504	161	8	.	.	.	.	3031
1.00-1.49	.	.	377	381	142	77	1	.	.	.	978
1.50-1.99	.	.	24	247	103	50	2	.	.	.	426
2.00-2.49	.	.	.	95	53	33	6	1	.	.	188
2.50-2.99	.	.	.	2	86	37	2	4	.	.	131
3.00-3.49	13	42	6	2	.	.	63
3.50-3.99	32	10	2	.	.	44
4.00-4.49	4	11	2	.	.	17
4.50-4.99	1	9	4	.	.	14
5.00-5.49	7	.	.	7
5.50-5.99	3	1	.	4
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	270	1450	2710	1349	561	284	47	25	2	0	6279

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 6279.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	474	1602	1491	238	18	.	.	.	.	.	3823
0.50-0.99	.	895	2611	1299	411	47	.	.	.	.	5263
1.00-1.49	.	1	426	505	486	159	12	.	.	.	1589
1.50-1.99	.	.	28	194	180	143	13	2	.	.	560
2.00-2.49	.	.	.	91	67	111	10	6	.	.	285
2.50-2.99	.	.	.	5	146	60	21	6	.	.	238
3.00-3.49	23	147	6	10	.	.	186
3.50-3.99	106	34	8	2	.	150
4.00-4.49	14	95	16	1	.	126
4.50-4.99	33	44	3	.	80
5.00-5.49	2	39	10	.	51
5.50-5.99	26	14	1	41
6.00-6.49	1	32	.	33
6.50-6.99	1	18	5	24
7.00+	8	19	27
TOTAL	474	2498	4556	2332	1331	787	226	159	88	25	11692

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 11692.

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	505	1348	502	64	16						2435
0.50-0.99		774	1379	227	133	49	1	.	.	.	2563
1.00-1.49	.	2	365	274	103	71	10	.	.	.	825
1.50-1.99	.		27	171	74	49	9	3	.	.	333
2.00-2.49	.	.	.	74	66	49	6	5	.	.	200
2.50-2.99	.	.	.	4	116	16	11	10	1	.	158
3.00-3.49	.	.	.	.	10	90	4	2	.	.	106
3.50-3.99	.	.	.	.	.	64	3	3	1	.	71
4.00-4.49	.	.	.	.	.	22	21	4	1	.	48
4.50-4.99	.	.	.	.	.	.	21	3	.	.	24
5.00-5.49	.	.	.	.	.	.	3	8	1	.	12
5.50-5.99	.	.	.	.	.	.	.	7	1	.	8
6.00-6.49	.	.	.	.	.	.	.	2	1	.	3
6.50-6.99	.	.	.	.	.	.	.	.	1	.	1
7.00+	.	.	.	.	.	.	.	.	1	2	3
TOTAL	505	2124	2273	814	518	410	89	47	8	2	
MEAN HS (M) = 0.9	LARGEST HS (M) = 7.7		MEAN TP (SEC) = 4.3		NO. OF CASES = 6370.						

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49			704	166	34	9					2923
0.50-0.99	501	1509	735	305	144	48	5	2	.	.	2675
1.00-1.49	.	.	561	218	89	53	5				926
1.50-1.99	.	.	79	214	59	21	11	2	3		389
2.00-2.49	.	.	1	108	42	32	10	3	1		197
2.50-2.99	.	.		8	64	28	6	7			113
3.00-3.49	.	.			10	50	7	6	4		77
3.50-3.99	.	.			2	17	18	13			50
4.00-4.49	.	.				3	8	4	2		17
4.50-4.99	.	.				1	5	3	2		11
5.00-5.49	.	.						1	2		3
5.50-5.99	.	.						2	1		3
6.00-6.49	.	.						1			1
6.50-6.99	.	.									0
7.00+	.	.									0
TOTAL	501	2244	2781	1019	444	262	75	44	15	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		6.2	MEAN TP(SEC)=		4.2	NO. OF CASES=		6926.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	778	2484	852	114	42	17	4	.	.	.	4291
0.50-0.99	.	1432	2907	267	86	102	26	2	.	.	4822
1.00-1.49	.	2	1208	196	56	41	19	5	.	.	1527
1.50-1.99	.	.	136	380	53	41	11	5	.	.	626
2.00-2.49	.	.	.	225	48	24	11	7	1	.	316
2.50-2.99	.	.	.	25	139	28	6	11	2	.	211
3.00-3.49	39	38	11	13	2	.	103
3.50-3.99	3	19	12	12	7	.	53
4.00-4.49	12	4	3	9	2	30
4.50-4.99	2	.	.	7	3	12
5.00-5.49	3	.	.	.	.	7
5.50-5.99	1	.	.	3	1	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	778	3918	5103	1207	466	328	104	58	31	6	
MEAN HS(M) = 0.8	LARGEST HS(M)=		5.5	MEAN TP(SEC)=		4.0	NO. OF CASES=		11246.		

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	796	1741	99	29	1	2	.	.	.	.	2668
0.50-0.99	.	2573	2128	19	6	3	4	.	.	.	4733
1.00-1.49	.	.	1379	39	2	1	2	.	.	.	1423
1.50-1.99	.	.	397	287	2	3	2	.	.	.	691
2.00-2.49	.	.	.	190	7	2	.	2	1	.	202
2.50-2.99	.	.	.	18	20	2	2	.	.	.	42
3.00-3.49	6	4	.	.	.	.	10
3.50-3.99	2	4	.	.	.	.	6
4.00-4.49	1	.	.	.	.	2
4.50-4.99	1	.	.	1	2
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	796	4314	4003	582	46	22	12	3	1	1	9155
MEAN HS(M) = 0.8	LARGEST HS(M) = 5.2		MEAN TP(SEC) = 3.6		NO. OF CASES = 9155						

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	618	1109	23	.	.	.	.	.	.	.	1750
0.50-0.99	.	2285	1158	.	1	.	.	.	.	.	3444
1.00-1.49	.	.	1011	1	1	.	.	.	.	.	1014
1.50-1.99	.	.	447	403	.	.	.	.	.	.	850
2.00-2.49	.	.	6	172	.	.	.	.	.	.	178
2.50-2.99	.	.	.	33	3	.	.	.	.	.	36
3.00-3.49	7	.	.	.	.	.	7
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	618	3394	2645	609	12	1	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6810.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	372	951	22	.	.	.	.	.	.	.	1345
0.50-0.99	.	1749	657	.	.	.	.	.	.	.	2406
1.00-1.49	.	.	860	1	1	.	.	.	.	.	862
1.50-1.99	.	.	406	115	.	.	.	.	.	.	521
2.00-2.49	.	.	4	117	.	.	.	.	.	.	121
2.50-2.99	.	.	.	7	5	.	.	.	.	.	12
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	372	2700	1949	240	6	0	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4931.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	305	679	29	3	.	.	.	.	.	.	1016
0.50-0.99	.	1491	539	5	1	1	.	.	.	.	2037
1.00-1.49	.	.	634	4	.	.	.	.	.	.	638
1.50-1.99	.	.	406	50	1	.	.	.	.	.	457
2.00-2.49	.	.	.	22	.	.	1	.	.	.	23
2.50-2.99	.	.	.	2	.	.	.	.	.	.	2
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	305	2170	1608	86	2	1	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3907.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	255	797	24	.	.	.	.	.	.	.	1076
0.50-0.99	.	1772	545	5	7	4	.	.	.	.	2333
1.00-1.49	.	.	781	4	3	2	.	.	.	.	790
1.50-1.99	.	.	328	44	1	.	.	.	.	.	373
2.00-2.49	.	.	3	32	.	1	.	.	.	.	36
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	255	2569	1681	86	11	7	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4316.

STATION S84 48.67N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

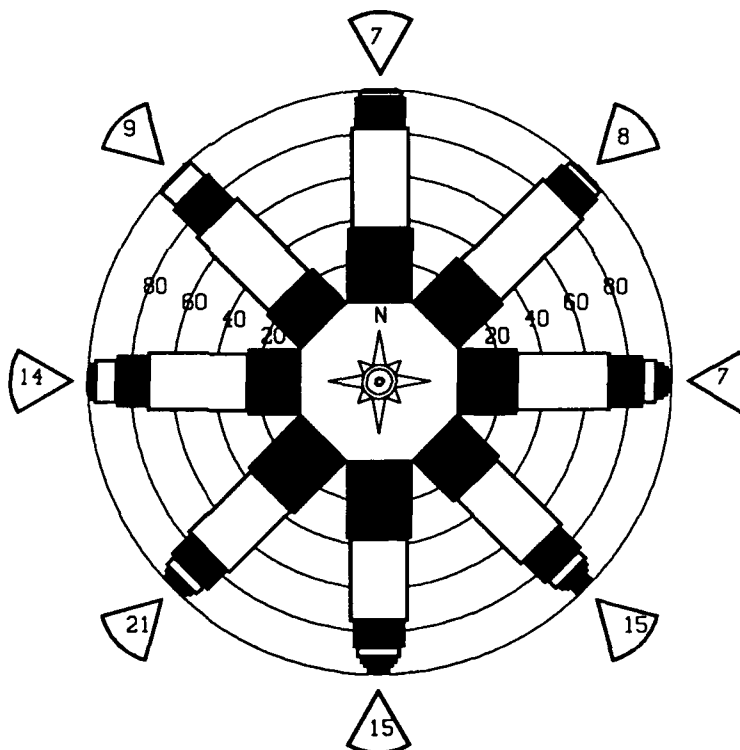
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	687	1804	448	76	12	2	3	.	.	.	3029
0.50-0.99	.	2148	1907	273	101	27	3	.	.	.	4459
1.00-1.49	.	.	1005	215	94	44	5	.	.	.	1363
1.50-1.99	.	.	277	262	54	34	5	1	.	.	633
2.00-2.49	.	.	2	134	37	28	4	2	.	.	207
2.50-2.99	.	.	.	11	74	20	5	4	.	.	114
3.00-3.49	12	47	3	3	.	.	65
3.50-3.99	28	8	4	1	.	41
4.00-4.49	7	14	3	1	.	25
4.50-4.99	7	5	1	.	13
5.00-5.49	5	1	.	6
5.50-5.99	4	1	.	5
6.00-6.49	3	.	3
6.50-6.99	2	.	2
7.00+	2
TOTAL	687	3952	3639	971	384	237	54	31	10	2	

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.

STATION 84
48.67N, 87.72 W
93504 CASES



OVER 3.0 M
2.5-2.9 M
2.0-2.4 M
1.5-1.9 M
1.0-1.4 M
0.5-0.9 M
0.0-0.4 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S84 (48.67N 87.72W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.5	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.8	0.7	0.7	0.6
1957	0.7	0.7	0.6	0.6	0.6	0.4	0.3	0.4	0.6	0.6	0.8	0.8	0.6
1958	0.6	0.7	0.4	0.6	0.6	0.5	0.4	0.4	0.6	0.6	0.8	0.8	0.6
1959	0.7	0.7	0.7	0.6	0.6	0.4	0.5	0.4	0.7	0.6	0.8	0.8	0.6
1960	0.7	0.6	0.5	0.6	0.6	0.4	0.4	0.3	0.5	0.6	0.9	0.8	0.6
1961	0.6	0.6	0.7	0.6	0.6	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1962	0.6	0.6	0.5	0.6	0.6	0.3	0.4	0.4	0.5	0.6	0.9	0.9	0.6
1963	0.8	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.6	0.7	0.9	0.9	0.6
1964	1.0	0.9	0.9	0.8	0.7	0.5	0.4	0.6	0.8	0.8	0.8	0.8	0.6
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9
MEAN	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.6	0.9	1.2	1.2	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S84 (48.67N 87.72W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.7	2.2	3.5	1.8	1.7	1.0	1.1	1.2	1.6	2.4	2.2	2.0	
1957	2.3	2.2	2.8	2.1	2.1	1.9	1.4	1.6	1.8	2.4	2.2	2.5	
1958	2.6	2.3	2.5	2.3	2.4	2.2	1.5	1.8	2.2	2.0	2.3	2.1	
1959	2.1	2.3	2.1	2.2	2.2	2.2	1.8	1.8	2.1	2.2	2.2	2.6	
1960	2.6	2.1	2.6	2.2	2.1	1.4	1.1	1.4	2.1	2.4	2.3	2.3	
1961	2.6	2.1	2.6	2.2	2.1	1.6	1.5	1.6	2.1	2.0	2.0	2.1	
1962	2.3	2.1	2.7	2.1	2.3	1.1	1.1	1.3	2.1	2.4	2.3	2.5	
1963	2.1	2.2	2.3	2.1	2.2	1.9	1.6	1.6	2.1	2.3	2.3	2.6	
1964	2.7	2.3	2.5	2.3	2.3	1.1	1.1	2.7	2.3	2.8	2.6	2.6	
1965	3.3	3.3	3.3	3.3	3.3	2.0	1.5	2.9	2.2	2.9	4.4	2.2	
1966	3.1	3.3	3.6	3.6	3.6	2.2	2.5	3.7	3.3	3.8	4.4	4.4	
1967	3.3	3.3	3.3	3.3	3.3	2.4	3.5	3.7	3.3	3.8	4.4	4.4	
1968	3.9	3.3	3.6	3.6	3.6	3.5	3.5	3.5	4.5	7.3	6.3	4.0	
1969	3.4	2.2	2.2	2.2	2.1	4.4	3.5	3.2	4.0	5.7	5.8	3.4	
1970	1.9	2.2	4.6	3.3	3.3	4.4	3.8	3.0	6.2	7.7	6.1	3.0	
1971	2.4	2.2	2.2	2.2	2.2	2.0	2.9	1.7	4.1	7.7	7.4	3.3	
1972	3.4	3.7	2.2	2.2	2.1	2.2	2.6	2.6	3.5	4.4	4.5	2.9	
1973	2.5	3.1	2.2	2.2	2.2	3.0	2.4	2.4	3.5	4.4	5.2	5.6	
1974	3.3	3.3	3.2	3.2	3.2	4.2	3.6	3.6	3.3	4.5	7.5	7.7	
1975	2.5	3.1	3.1	3.1	3.1	2.3	1.2	3.7	3.3	4.6	7.4	2.8	
1976	3.0	2.2	3.2	3.2	3.2	1.7	1.4	1.6	2.5	2.9	2.2	3.4	
1977	2.7	2.7	3.3	3.3	3.3	1.6	1.8	1.6	4.5	2.4	5.5	4.1	
1978	2.0	1.6	2.9	2.3	2.3	2.0	1.0	1.6	2.2	2.8	3.4	4.6	
1979	2.3	2.7	2.1	3.3	3.3	2.1	3.5	3.5	3.6	5.4	7.6	3.0	
1980	2.9	1.7	3.9	3.5	2.2	3.8	2.1	4.3	3.5	7.8	4.9	3.6	
1981	1.9	2.0	2.7	2.2	1.8	3.6	1.1	1.5	5.5	6.6	5.1	2.4	
1982	4.2	2.0	4.2	3.0	4.7	3.9	2.3	2.3	4.5	6.1	6.6	3.4	
1983	3.7	3.8	3.9	2.2	2.1	2.8	2.9	2.3	4.4	6.3	5.6	3.3	
1984	3.6	3.2	3.4	3.8	2.6	3.1	1.3	2.7	6.7	7.3	8.3	5.5	
1985	2.3	3.1	3.5	3.0	2.9	3.9	2.3	3.6	4.9	7.0	5.4	3.2	
1986	4.5	3.0	3.2	2.5	1.8	1.5	1.6	2.6	3.9	6.5	7.1	2.2	
1987	2.4	3.5	3.3	1.7	2.3	1.1	1.7	1.4	1.6	2.8	3.4	3.3	

32 YR. STATISTICS FOR WIS STATION S84

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	157.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	8.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	148.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	84110400

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	364	1007	70	8	2	.	.	.	.	.	1451
0.50-0.99	.	1519	205	33	16	3	.	.	.	.	1776
1.00-1.49	.	.	603	9	10	7	.	.	.	.	629
1.50-1.99	.	.	116	1	4	6	.	.	.	.	127
2.00-2.49	.	.	3	5	2	.	.	.	.	.	10
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	364	2526	997	57	32	18	0	0	0	0	3742.

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3742.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	310	630	58	4	.	.	.	.	.	.	1002
0.50-0.99	.	1124	322	19	17	6	.	.	.	.	1488
1.00-1.49	.	.	352	31	10	10	.	.	.	.	403
1.50-1.99	.	.	100	13	3	9	1	.	.	.	126
2.00-2.49	.	.	2	10	4	1	.	.	.	.	17
2.50-2.99	4	.	.	.	.	4
3.00-3.49	1	.	.	.	.	1
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	310	1754	834	77	34	31	1	0	0	0	2853.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 2853.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	576	900	70	6	.	.	.	.	.	.	1552
0.50-0.99	.	1161	407	35	14	.	.	.	.	.	1617
1.00-1.49	.	.	318	35	10	9	.	.	.	.	372
1.50-1.99	.	.	125	23	5	3	1	.	.	.	157
2.00-2.49	.	.	2	9	7	3	.	.	.	.	22
2.50-2.99	.	.	.	2	4	2	1	.	.	.	8
3.00-3.49	4	.	.	.	.	4
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	576	2061	922	110	40	21	2	0	0	0	3499.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 3499.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	370	789	44	5	1	.	.	.	.	.	1209
0.50-0.99	.	1703	875	28	19	.	.	.	.	.	2615
1.00-1.49	.	.	507	64	7	.	.	.	.	.	582
1.50-1.99	.	.	122	101	13	4	.	.	.	.	247
2.00-2.49	.	.	1	4	7	3	.	.	.	.	67
2.50-2.99	.	.	.	3	25	6	.	.	.	.	34
3.00-3.49	3	21	.	.	.	.	24
3.50-3.99	14	.	.	.	.	14
4.00-4.49	1	.	.	.	.	2
4.50-4.99	3	.	.	.	3
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	370	2492	1549	248	76	58	4	0	0	0	4498.

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4498.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	423	873	58	2	3	.	.	.	.	.	1356
0.50-0.99	.	849	1498	31	.	.	.	.	.	.	2381
1.00-1.49	.	.	565	291	16	4	.	.	.	.	876
1.50-1.99	.	.	36	276	33	7	1	.	.	.	353
2.00-2.49	.	.	.	119	59	7	.	.	.	.	185
2.50-2.99	98	11	.	2	.	.	111
3.00-3.49	11	45	.	.	.	.	56
3.50-3.99	43	.	.	.	.	43
4.00-4.49	8	6	.	.	.	14
4.50-4.99	6	.	.	.	6
5.00-5.49	1	2	.	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	423	1722	2157	719	220	125	14	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5048.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	282	606	37	3	1	.	.	.	.	.	928
0.50-0.99	.	505	903	6	1	.	.	.	.	.	1415
1.00-1.49	.	.	297	178	11	1	.	.	.	.	487
1.50-1.99	.	.	18	142	40	9	.	.	.	.	209
2.00-2.49	.	.	.	58	34	16	.	.	.	.	108
2.50-2.99	.	.	.	1	55	20	2	2	.	.	80
3.00-3.49	11	37	1	1	.	.	50
3.50-3.99	19	3	.	.	.	22
4.00-4.49	2	6	2	.	.	10
4.50-4.99	5	1	.	.	6
5.00-5.49	1	.	.	1
5.50-5.99	1	1	2
6.00-6.49	1	1	2
6.50-6.99	2	2
7.00+	2
TOTAL	282	1111	1255	388	152	104	17	7	2	4	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 3118.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	332	1007	660	116	4	.	.	.	.	.	2119
0.50-0.99	.	652	2028	707	150	8	.	.	.	.	3545
1.00-1.49	.	.	391	534	232	67	.	.	.	.	1224
1.50-1.99	.	.	41	241	189	86	.	.	.	.	557
2.00-2.49	.	.	1	104	75	103	6	.	.	.	289
2.50-2.99	.	.	.	6	116	81	16	5	.	.	224
3.00-3.49	16	91	17	5	.	.	129
3.50-3.99	49	32	8	1	.	90
4.00-4.49	10	35	9	1	.	55
4.50-4.99	5	29	.	.	34
5.00-5.49	17	10	1	28
5.50-5.99	2	6	1	9
6.00-6.49	7	2	9
6.50-6.99	6	1	7
7.00+	11
TOTAL	332	1659	3121	1708	782	495	111	75	31	16	

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 7811.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	479	1515	1656	399	36	1	.	.	.	.	4086
0.50-0.99	.	880	2115	1435	607	82	1	.	.	.	5120
1.00-1.49	.	2	316	340	560	219	16	1	.	.	1454
1.50-1.99	.	.	21	144	143	174	21	1	.	.	504
2.00-2.49	.	.	.	56	33	91	22	9	.	.	213
2.50-2.99	.	.	.	4	55	40	17	14	.	.	130
3.00-3.49	11	58	16	13	1	.	99
3.50-3.99	1	34	25	9	1	.	70
4.00-4.49	5	22	24	4	.	55
4.50-4.99	7	18	8	.	33
5.00-5.49	1	14	13	2	30
5.50-5.99	3	9	1	14
6.00-6.49	2	8	1	11
6.50-6.99	6	4	10
7.00+	1	10	11
TOTAL	479	2397	4108	2378	1448	704	148	108	51	19	

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 11095.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	648	1479	528	100	34	8	.	.	.	.	2797
0.50-0.99	.	858	1193	248	132	89	1	1	.	.	2522
1.00-1.49	.	.	442	217	111	113	20	1	.	.	904
1.50-1.99	.	.	51	179	71	66	25	5	.	.	397
2.00-2.49	.	.	.	87	45	45	17	8	.	.	202
2.50-2.99	.	.	.	6	97	21	11	8	2	.	145
3.00-3.49	10	64	6	6	.	.	86
3.50-3.99	63	5	1	.	.	69
4.00-4.49	10	20	2	.	.	32
4.50-4.99	1	8	5	1	.	15
5.00-5.49	3	3	1	.	7
5.50-5.99	1	3	.	.	4
6.00-6.49	1	.	1	1
6.50-6.99	1	1	2
7.00+	0
TOTAL	648	2337	2214	837	500	480	117	44	5	1	6736

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 6736.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	623	1808	772	216	57	21	1	.	.	.	3498
0.50-0.99	.	942	1349	265	146	100	11	.	.	.	2817
1.00-1.49	.	.	518	170	75	47	12	5	.	.	832
1.50-1.99	.	.	71	220	55	39	17	4	5	.	407
2.00-2.49	.	.	.	100	42	20	7	9	1	.	179
2.50-2.99	.	.	.	11	75	8	2	2	2	.	100
3.00-3.49	31	41	3	3	.	.	78
3.50-3.99	1	21	3	5	2	.	32
4.00-4.49	9	4	1	.	.	14
4.50-4.99	1	.	2	.	.	3
5.00-5.49	5	1	.	.	6
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	623	2750	2710	982	482	307	65	37	11	0	7469

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 7469.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1017	2730	884	121	24	24	5	.	.	.	4805
0.50-0.99	.	2502	1763	183	51	51	33	7	.	.	4594
1.00-1.49	.	.	867	216	33	24	1	5	1	.	1147
1.50-1.99	.	.	173	281	34	14	6	8	2	.	513
2.00-2.49	.	.	3	145	32	10	6	8	2	2	226
2.50-2.99	.	.	.	12	94	11	2	1	2	.	121
3.00-3.49	25	47	2	1	2	.	77
3.50-3.99	39	1	1	1	.	41
4.00-4.49	10	13	1	.	.	24
4.50-4.99	7	1	.	.	8
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1017	5232	3690	958	317	230	76	27	8	2	10825

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 10825.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1145	2480	79	13	.	.	.	.	.	.	3717
0.50-0.99	.	2713	312	7	5	.	.	.	.	.	3037
1.00-1.49	.	.	776	3	.	.	.	.	.	.	783
1.50-1.99	.	.	222	26	3	3	.	1	.	.	255
2.00-2.49	.	.	11	10	.	1	.	1	.	1	24
2.50-2.99	.	.	.	2	2	.	.	.	.	.	4
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1145	5193	1400	61	10	8	0	2	1	1	7320

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 7320.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	850	1533	62	5	3	.	.	.	.	.	2453
0.50-0.99	.	1720	329	10	1	.	.	.	.	.	2060
1.00-1.49	.	.	829	1	1	1	.	.	.	.	832
1.50-1.99	.	.	199	2	.	.	.	.	.	.	201
2.00-2.49	.	.	10	17	.	.	.	.	.	.	27
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	850	3253	1429	35	5	1	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 5217.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	458	1020	36	5	.	.	.	.	.	.	1519
0.50-0.99	.	1537	525	4	1	2	.	.	.	.	2069
1.00-1.49	.	.	656	3	2	.	.	.	.	.	661
1.50-1.99	.	.	407	42	1	.	.	.	.	.	450
2.00-2.49	.	.	3	50	.	.	.	.	.	.	53
2.50-2.99	.	.	.	8	.	.	1	.	.	.	9
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	458	2557	1627	112	4	2	1	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4458.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	347	830	47	2	1	1	.	.	.	.	1228
0.50-0.99	.	1837	887	10	6	4	.	.	.	.	2744
1.00-1.49	.	.	739	4	2	2	.	.	.	.	747
1.50-1.99	.	.	614	83	1	1	.	.	.	.	699
2.00-2.49	.	.	.	60	1	1	.	.	.	.	62
2.50-2.99	.	.	.	7	.	1	.	.	.	.	8
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	347	2667	2287	166	11	10	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5139.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	329	824	48	2	2	.	.	.	.	.	1205
0.50-0.99	.	1786	532	14	13	3	.	.	.	.	2348
1.00-1.49	.	.	888	14	7	9	.	.	.	.	918
1.50-1.99	.	.	436	49	.	3	.	.	.	.	488
2.00-2.49	.	.	2	29	.	1	.	.	.	.	32
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	329	2610	1906	109	22	16	0	0	0	0	0

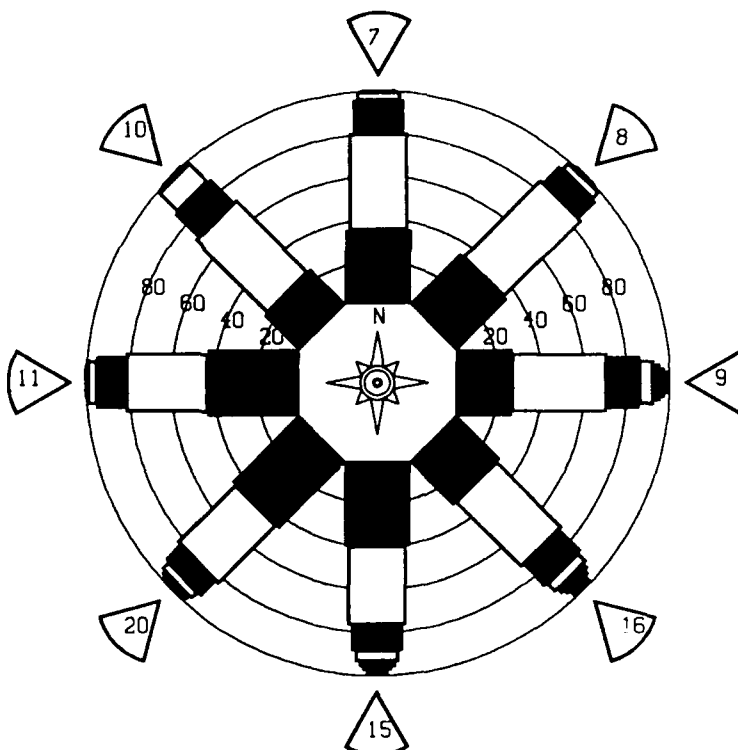
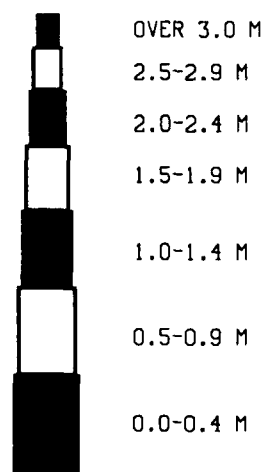
MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 4676.

STATION S85 48.67N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	855	2003	511	101	16	5					3491
0.50-0.99		2229	1525	304	118	35	4	1			4216
1.00-1.49			907	211	109	52	5	1			1285
1.50-1.99			276	183	60	43	7	1			570
2.00-2.49			4	91	37	31	6	3			172
2.50-2.99				6	62	20	5	3			96
3.00-3.49					12	41	4	3			60
3.50-3.99						7	2				37
4.00-4.49						5	11	4			20
4.50-4.99							1	5			9
5.00-5.49								4	2		7
5.50-5.99								1	1		1
6.00-6.49									1		1
6.50-6.99									1		1
7.00+										2	2
TOTAL	855	4232	3223	896	414	260	54	27	5	2	93504

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.

STATION 85
48.67N, 87.93 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S85 (48.67N 87.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.6	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.8	0.8	0.7	0.6
1957	0.7	0.7	0.7	0.6	0.6	0.5	0.3	0.4	0.6	0.8	0.8	0.8	0.6
1958	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1959	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1960	0.7	0.6	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.6	0.6	0.6	0.6
1961	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.6	0.6	0.6	0.6
1962	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.6	0.6	0.6	0.6	0.6
1963	0.8	0.9	0.9	0.8	0.6	0.5	0.4	0.4	0.6	0.6	0.6	0.6	0.6
1964	1.0	0.8	0.8	0.8	0.6	0.6	0.4	0.6	0.7	0.7	0.8	0.8	0.7
1965	1.1	1.1	1.1	1.0	0.8	0.6	0.4	0.6	0.6	0.8	1.1	1.1	0.8
1966	1.1	1.1	1.1	1.0	0.9	0.6	0.6	0.6	0.7	1.1	1.1	1.1	0.9
1967	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.7	1.1	1.1	1.1	1.1	0.9
1968	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.7	1.1	1.1	1.1	1.1	0.9
1969	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.7	1.1	1.1	1.1	1.1	0.9
1970	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1971	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1972	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1973	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1974	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1975	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1976	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1977	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1978	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1979	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1980	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1981	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1982	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1983	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1984	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1985	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1986	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8
1987	0.7	0.8	0.9	0.5	0.5	0.5	0.4	0.4	0.4	0.7	0.8	0.8	0.6
MEAN	0.8	0.8	0.8	0.7	0.6	0.5	0.4	0.5	0.8	1.1	1.1	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S85 (48.67N 87.93W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1957	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1958	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1959	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1960	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1961	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1962	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1963	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1964	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1965	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1966	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1967	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1968	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1969	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1970	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1971	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1972	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1973	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1974	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1975	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1976	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1977	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1978	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1979	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1980	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1981	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1982	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1983	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1984	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1985	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1986	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	
1987	2.3	2.6	2.7	2.3	1.8	1.2	1.0	1.2	2.0	2.2	2.4	2.2	

32 YR. STATISTICS FOR WIS STATION S85

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	157.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	8.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	147.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	68101000

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	183	649	131	6							969
0.50-0.99		1083	460	72	11	2					1628
1.00-1.49			558	93	21	10					682
1.50-1.99			176	23	10	14	1				224
2.00-2.49			3	10	3	3					19
2.50-2.99				2	2	1					5
3.00-3.49							1				1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	183	1732	1328	206	47	30	2	0	0	0	3309.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3309.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	260	585	121	2							968
0.50-0.99		636	608	44	14	2					1304
1.00-1.49			437	67	14	12					530
1.50-1.99			58	126	7	5					196
2.00-2.49			1	68	3	4	2				78
2.50-2.99				9	8	1					18
3.00-3.49				1	1	1					3
3.50-3.99						1	1				2
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	260	1221	1225	317	47	26	3	0	0	0	2909.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 2909.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	396	782	145	11							1334
0.50-0.99		524	909	48	9						1490
1.00-1.49			571	100	10	4					685
1.50-1.99			66	248	9	8					331
2.00-2.49				128	8	3	1				140
2.50-2.99				20	9	1					30
3.00-3.49					6	4	2				12
3.50-3.99					1	1	2				4
4.00-4.49						2	2				4
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	396	1306	1691	555	52	23	7	0	0	0	3778.

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 3778.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	370	684	136	2							1192
0.50-0.99		572	1315	45	7						1939
1.00-1.49			566	142	18	1					727
1.50-1.99			51	243	24	11					329
2.00-2.49				120	25	6					151
2.50-2.99				8	77	3	1				81
3.00-3.49					10	42	5				57
3.50-3.99						24	1				25
4.00-4.49						6	10				16
4.50-4.99							2				4
5.00-5.49							2				3
5.50-5.99							1				1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	370	1256	2068	560	161	95	16	4	0	0	4249.

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4249.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	376	943	125	2	.	.	.	.	.	.	1446
0.50-0.99	.	918	2128	70	3	.	.	.	.	.	3119
1.00-1.49	.	.	713	406	23	2	.	.	.	.	1144
1.50-1.99	.	.	26	386	65	12	.	.	.	.	489
2.00-2.49	.	.	.	135	82	22	2	.	.	.	241
2.50-2.99	.	.	.	2	124	19	2	2	.	.	149
3.00-3.49	18	65	.	1	.	.	84
3.50-3.99	50	3	.	.	.	53
4.00-4.49	7	16	.	.	.	23
4.50-4.99	3	6	1	.	.	10
5.00-5.49	3	.	.	.	3
5.50-5.99	4	.	.	4
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	376	1861	2992	1001	315	180	32	9	0	0	6337.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 6337.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	233	682	89	2	.	.	.	.	.	.	1006
0.50-0.99	.	513	1315	45	2	.	.	.	.	.	1875
1.00-1.49	.	.	379	250	17	.	.	.	.	.	646
1.50-1.99	.	.	13	161	56	8	.	.	.	.	238
2.00-2.49	.	.	.	71	24	20	1	.	.	.	116
2.50-2.99	.	.	.	2	68	17	1	2	.	.	90
3.00-3.49	8	47	1	1	.	.	58
3.50-3.99	32	5	1	1	.	38
4.00-4.49	1	17	2	.	.	20
4.50-4.99	6	1	.	.	7
5.00-5.49	1	3	.	.	4
5.50-5.99	2	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	233	1195	1796	531	175	125	32	9	5	0	3846.

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3846.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	205	795	619	80	.	.	.	.	.	.	1699
0.50-0.99	.	555	1821	888	99	2	.	.	.	.	3365
1.00-1.49	.	.	312	483	382	56	.	.	.	.	1253
1.50-1.99	.	.	14	193	203	133	3	.	.	.	543
2.00-2.49	.	.	.	48	162	162	4	.	.	.	315
2.50-2.99	.	.	.	2	63	115	4	.	.	.	229
3.00-3.49	9	73	39	17	.	.	138
3.50-3.99	18	34	20	3	.	75
4.00-4.49	1	22	27	7	.	57
4.50-4.99	3	11	13	1	28
5.00-5.49	5	10	4	19
5.50-5.99	4	7	1	11
6.00-6.49	7	3	12
6.50-6.99	1	3
7.00+	1
TOTAL	205	1350	2767	1694	851	560	154	88	46	15	7248.

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.9 NO. OF CASES= 7248.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	393	1260	1186	362	32	3	.	.	.	.	3236
0.50-0.99	.	826	1723	1303	634	90	.	.	.	.	4576
1.00-1.49	.	.	317	291	525	225	14	.	.	.	1372
1.50-1.99	.	.	37	95	127	216	25	1	.	.	501
2.00-2.49	.	.	.	44	41	70	32	8	.	.	195
2.50-2.99	.	.	.	5	34	34	29	13	.	.	115
3.00-3.49	8	19	10	6	1	.	44
3.50-3.99	13	7	10	2	.	32
4.00-4.49	4	2	10	1	.	17
4.50-4.99	1	.	3	2	1	7
5.00-5.49	3	.	2	12
5.50-5.99	2	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	393	2086	3263	2100	1401	675	119	54	15	3	9474.

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9474.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	515	1322	496	90	27	4					2454
0.50-0.99		893	1383	213	135	79	2				2703
1.00-1.49			486	217	99	93	3				898
1.50-1.99			71	137	78	70	14	4			374
2.00-2.49				94	28	36	17				181
2.50-2.99				10	50	31	10	3			106
3.00-3.49					11	22	6	3			68
3.50-3.99						2	7				31
4.00-4.49							2		1		10
4.50-4.99								1	1		4
5.00-5.49											0
5.50-5.99											0
6.00-6.49									2		0
6.50-6.99											0
7.00+											0
TOTAL	515	2215	2436	761	428	390	64	20	4	0	6407.

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 6407.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	532	1491	581	141	36	11	1				2793
0.50-0.99		930	1273	192	112	78	7	1			2593
1.00-1.49			578	116	54	41	7	2			798
1.50-1.99			86	168	28	34	14	3	4		337
2.00-2.49			2	118	29	14	8	6			177
2.50-2.99				7	70	12	14	7	1		111
3.00-3.49				1	27	9	11	8	1		57
3.50-3.99						8	2	1	1		12
4.00-4.49						2	1				7
4.50-4.99						3	2	3	1		5
5.00-5.49								1			1
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	532	2421	2520	743	356	212	67	32	8	0	6467.

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 6467.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	922	2652	687	65	23	16	1				4366
0.50-0.99		2574	2086	224	50	35	17				4986
1.00-1.49			936	162	51	21	5	5			1180
1.50-1.99			161	245	18	17	6	3			450
2.00-2.49			6	148	47	9	4	4	2	1	221
2.50-2.99				11	68	8		1	5	2	95
3.00-3.49				1	21	31			1		54
3.50-3.99					1	19	2				22
4.00-4.49						7	2				9
4.50-4.99							2	1			3
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	922	5226	3876	856	279	163	39	14	8	3	10662.

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 10662.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1085	2654	199	13		1					3952
0.50-0.99		3209	518	42	9	2	1				3781
1.00-1.49			1006	11	2	2					1021
1.50-1.99			294	39	5	3					341
2.00-2.49			24	27	3	1	1	1			57
2.50-2.99				7	6		1				14
3.00-3.49					1						1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1085	5863	2041	139	26	9	3	1	0	0	8582.

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 8582.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	751	1363	159	12	2	.	.	i	.	.	2287
0.50-0.99	.	1879	403	35	2	2	.	i	.	.	2325
1.00-1.49	.	.	1078	8	2	3	i	.	.	.	1092
1.50-1.99	.	.	358	2	1	1	.	i	.	.	364
2.00-2.49	.	.	26	42	.	.	.	i	.	.	68
2.50-2.99	.	.	.	9	.	.	.	.	.	.	10
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	751	3242	2025	108	10	6	i	3	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 5754.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	436	963	113	4	.	.	.	.	.	.	1516
0.50-0.99	.	1530	566	25	12	i	.	.	.	.	2134
1.00-1.49	.	.	784	8	4	8	.	.	.	.	804
1.50-1.99	.	.	539	69	2	1	.	.	.	.	611
2.00-2.49	.	.	17	90	1	1	i	.	.	.	109
2.50-2.99	.	.	.	16	.	i	.	2	.	.	19
3.00-3.49	.	.	.	1	i	.	.	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	436	2493	2019	213	20	11	i	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4866.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	249	733	154	4	1	.	.	.	.	.	1141
0.50-0.99	.	1633	937	40	9	3	.	.	.	.	2622
1.00-1.49	.	.	901	18	14	2	.	.	.	.	935
1.50-1.99	.	.	803	140	3	8	.	.	.	.	954
2.00-2.49	.	.	1	124	1	1	i	.	.	.	127
2.50-2.99	.	.	.	21	i	.	.	.	.	.	22
3.00-3.49	.	.	.	1	2	.	.	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	249	2366	2796	348	30	14	i	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5434.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

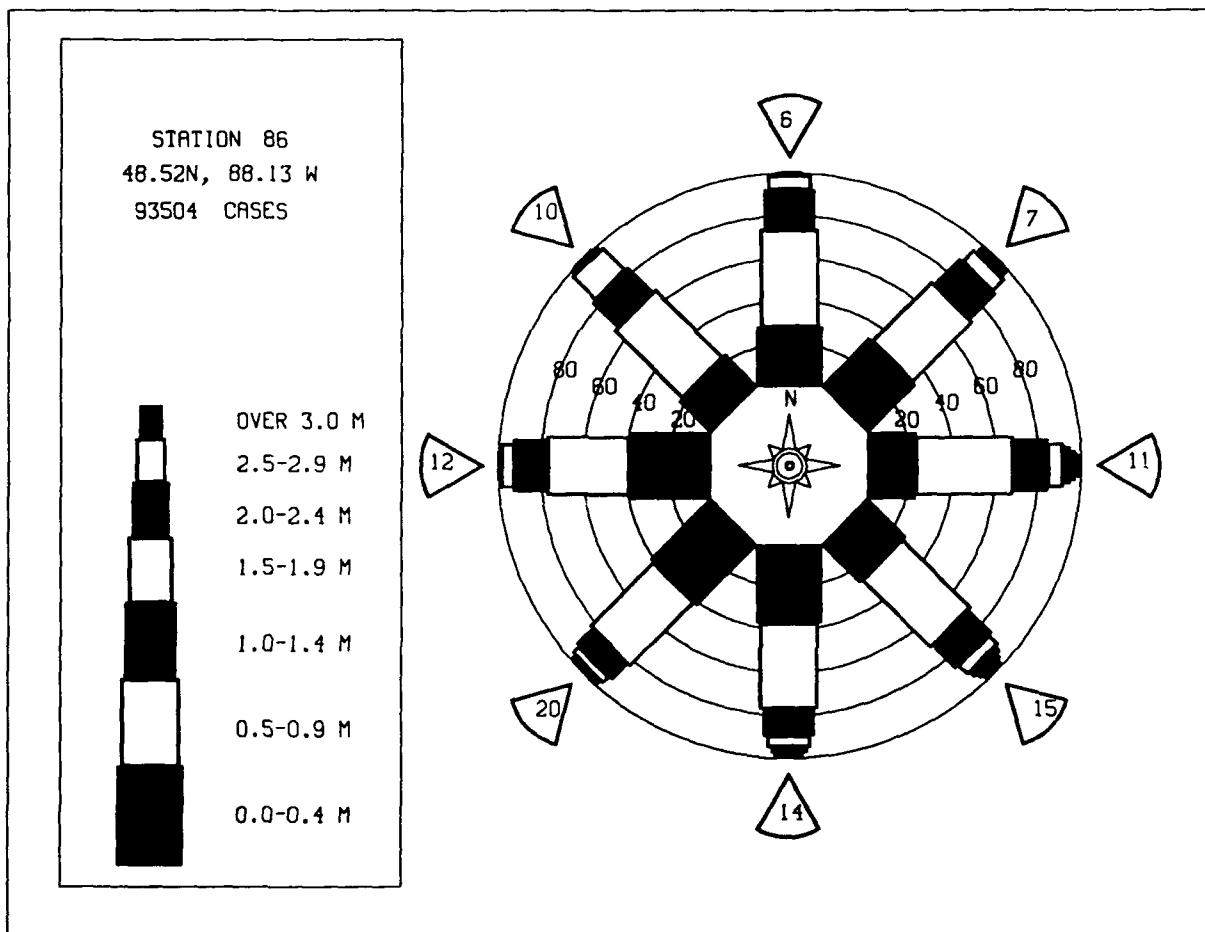
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	193	549	135	4	.	.	.	.	.	.	881
0.50-0.99	.	1461	591	65	26	i	.	.	.	.	2144
1.00-1.49	.	.	828	32	9	9	i	.	.	.	879
1.50-1.99	.	.	448	58	1	2	3	.	.	.	512
2.00-2.49	.	.	3	42	.	2	.	.	.	.	47
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	193	2010	2005	201	36	14	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4182.

STATION S86 48.52N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	710	1811	508	80	12	3					3124
0.50-0.99		1974	1804	336	114	29	2				4259
1.00-1.49			1045	241	125	49	3				1463
1.50-1.99			320	234	64	54	6	1			679
2.00-2.49			8	131	39	36	8	2			224
2.50-2.99				13	58	24	10	3			108
3.00-3.49					12	34	6	3			55
3.50-3.99						19	6	3			28
4.00-4.49						3	8	4	1		16
4.50-4.99							2	2	1		5
5.00-5.49								1	1		2
5.50-5.99									1		1
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	710	3785	3685	1035	424	251	51	19	5	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S86 (48.52N 88.13W)

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.7	0.9	1.0	0.8	0.7	0.5	0.5	0.5	0.5	0.9	0.9	0.8	0.7
1957	0.8	0.9	0.7	0.7	0.7	0.6	0.5	0.5	0.7	0.7	1.0	1.0	0.7
1958	0.7	0.9	0.6	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1959	0.8	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1960	0.8	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1961	0.7	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1962	1.0	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1963	0.9	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.7
1964	1.1	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1965	1.1	1.1	0.9	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.9
1966	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.7	1.0	1.0	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.7	1.0	1.0	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.7	1.0	1.0	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.0	0.8	0.7	1.0	1.0	1.1	1.1	1.1
1970	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1971	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1972	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1973	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1974	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.0	1.0	0.8
1975	0.6	0.5	0.6	0.3	0.5	0.6	0.4	0.6	0.8	1.0	1.1	1.1	0.7
1976	1.0	1.0	1.1	0.7	0.6	0.6	0.5	0.5	0.7	0.8	0.9	0.9	0.8
1977	0.9	1.1	1.2	0.6	0.6	0.5	0.5	0.5	0.7	0.8	0.9	0.9	0.8
1978	0.7	0.6	0.7	0.8	0.6	0.5	0.5	0.5	0.8	0.8	0.9	0.9	0.7
1979	0.7	0.8	0.8	0.6	0.6	0.6	0.4	0.6	0.7	1.0	1.1	1.1	0.7
1980	0.9	0.6	0.8	0.5	0.5	0.5	0.4	0.6	1.0	1.1	1.1	1.1	0.7
1981	0.8	0.9	0.9	0.8	0.5	0.6	0.4	0.4	0.8	1.1	1.1	1.1	0.7
1982	1.1	0.8	1.1	0.8	0.8	0.5	0.4	0.4	0.8	1.1	1.1	1.1	0.8
1983	1.0	1.0	1.2	0.7	0.6	0.5	0.4	0.4	0.8	1.1	1.1	1.1	0.9
1984	1.0	1.0	1.0	0.9	0.6	0.6	0.4	0.4	0.8	1.1	1.1	1.1	0.9
1985	1.0	0.9	1.2	0.8	0.6	0.7	0.4	0.6	1.0	1.1	1.1	1.1	0.9
1986	1.0	0.8	1.0	0.9	0.6	0.5	0.4	0.5	0.9	1.0	1.1	1.1	0.8
1987	0.7	0.8	1.0	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.8	0.8	0.6
MEAN	0.9	0.9	1.0	0.8	0.7	0.6	0.5	0.5	0.8	1.0	1.1	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S86 (48.52N 88.13W)

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	3.1	3.2	4.5	2.4	2.1	1.3	1.4	1.4	2.4	2.7	2.6	2.8
1957	2.7	2.9	2.8	2.8	2.0	2.4	1.6	2.0	1.9	1.9	3.0	2.4
1958	2.7	2.7	1.5	2.8	1.7	2.7	1.5	2.1	2.6	2.3	2.2	2.1
1959	1.9	3.0	2.8	2.2	2.7	1.5	2.3	1.8	2.6	2.3	2.5	3.3
1960	2.2	2.5	2.3	2.2	2.2	1.6	1.5	2.7	1.8	2.3	3.2	3.2
1961	1.9	2.6	2.3	2.2	1.7	1.4	1.4	1.7	2.4	2.2	4.0	2.5
1962	2.5	2.6	2.5	1.8	2.0	1.3	1.6	1.5	1.9	4.8	2.9	3.6
1963	2.2	2.8	2.5	2.3	2.0	2.8	1.5	1.6	1.9	2.4	2.8	4.2
1964	3.6	3.1	2.5	3.2	2.9	1.7	1.1	2.7	2.6	2.9	3.1	3.2
1965	3.8	3.6	3.5	2.9	2.2	1.6	1.2	1.5	2.4	2.7	5.7	4.8
1966	3.7	3.4	6.0	4.9	2.8	2.4	2.6	2.6	2.2	4.3	4.0	4.3
1967	4.7	2.8	4.5	3.4	4.3	4.2	1.8	2.3	3.9	6.2	3.6	4.5
1968	3.8	3.4	3.8	3.4	3.4	2.2	3.1	1.8	3.1	7.1	4.2	5.1
1969	4.1	2.9	2.6	2.1	2.8	3.2	1.3	2.4	3.2	3.9	4.1	3.9
1970	1.9	2.2	5.1	3.9	3.5	1.9	1.3	2.3	4.8	6.4	4.5	3.7
1971	2.3	3.3	3.1	2.3	2.8	2.2	2.0	1.2	3.0	6.3	5.6	3.4
1972	3.3	4.3	3.4	2.2	1.1	0.9	1.3	1.5	4.4	3.6	3.1	4.0
1973	3.2	2.9	2.6	2.2	2.2	2.6	1.4	1.6	4.7	3.8	4.2	3.3
1974	2.8	2.0	3.7	2.3	2.9	2.8	1.1	2.8	2.1	3.1	5.8	3.5
1975	3.2	1.4	1.9	0.7	1.5	1.5	1.4	2.7	3.8	5.5	6.2	3.3
1976	3.5	2.6	3.7	1.9	1.7	1.9	1.6	1.6	2.4	2.7	2.1	3.2
1977	2.2	4.3	4.2	2.0	2.3	2.1	1.8	1.4	3.9	2.9	4.8	5.0
1978	2.1	1.7	3.2	2.6	1.8	2.1	1.2	1.6	3.0	2.8	3.2	5.0
1979	2.1	3.2	2.5	3.7	3.2	4.1	1.3	2.2	2.7	4.3	6.9	2.7
1980	3.6	1.8	4.0	1.9	2.0	1.9	1.5	3.1	4.1	6.1	3.5	3.6
1981	1.7	2.5	2.8	3.2	1.6	2.6	1.0	1.1	4.3	4.8	4.1	2.4
1982	3.5	2.3	3.6	3.7	3.3	2.8	1.5	1.8	3.5	4.3	5.4	3.1
1983	3.5	3.3	4.9	2.7	1.6	1.8	2.0	1.9	3.2	4.9	4.9	3.5
1984	3.0	3.7	3.0	3.3	2.0	2.6	0.9	1.4	4.9	5.6	6.4	3.1
1985	3.0	2.9	5.7	2.5	2.2	3.1	1.3	2.9	3.4	5.5	3.9	2.8
1986	5.4	3.7	2.8	3.0	1.9	1.4	1.5	1.7	3.1	4.9	6.3	2.7
1987	2.4	4.1	3.8	1.8	1.8	0.8	1.5	1.1	1.6	2.7	2.8	3.1

32 YR. STATISTICS FOR WIS STATION S86

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	138.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	68101000

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	157	464	122	5							748
0.50-0.99		1009	449	159	10	2					1629
1.00-1.49			521	157	57	19					754
1.50-1.99			201	25	43	20	3				292
2.00-2.49			19	8	20	10	2				59
2.50-2.99				2	2	5	1				10
3.00-3.49								1			5
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	157	1473	1312	358	132	58	7	1	0	0	3281.

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3281.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	222	491	110	4							827
0.50-0.99		623	621	90	11	1					1346
1.00-1.49			355	150	21	10					536
1.50-1.99			60	162	26	10					258
2.00-2.49			2	86	25	4	1				118
2.50-2.99				7	47	3					57
3.00-3.49					12	3					15
3.50-3.99						3					3
4.00-4.49						1	1				2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	222	1114	1148	499	142	35	2	0	0	0	2969.

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 2969.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	348	658	119	7							1132
0.50-0.99		635	818	89	7	2					1551
1.00-1.49			414	156	12	4					586
1.50-1.99			31	251	24	6					313
2.00-2.49				127	35	7	1				170
2.50-2.99				3	93	5					101
3.00-3.49					31	10					41
3.50-3.99					2	4	3				9
4.00-4.49						3	2				6
4.50-4.99						1		1			2
5.00-5.49						1	2				3
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	348	1293	1382	633	204	43	9	2	0	0	3671.

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3671.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	298	741	98	3							1140
0.50-0.99		712	1280	98	6						2096
1.00-1.49			445	212	25	2					684
1.50-1.99			29	229	35	11					305
2.00-2.49				140	31	12	2				205
2.50-2.99				2	98	11					111
3.00-3.49					12	60					72
3.50-3.99						37	6				43
4.00-4.49						7	18				25
4.50-4.99							14	2			16
5.00-5.49							3	1			4
5.50-5.99								5			5
6.00-6.49									2		2
6.50-6.99									1		1
7.00+											0
TOTAL	298	1453	1852	684	228	140	43	8	3	0	4418.

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 4418.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 7965.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 4159.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 5779.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8026.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	388	1241	418	71	18	4	.	.	.	.	2140
0.50-0.99	.	972	1187	218	136	66	1	.	.	.	2580
1.00-1.49	.	.	337	254	74	68	3	.	.	.	738
1.50-1.99	.	.	52	83	75	55	10	3	.	.	275
2.00-2.49	.	.	1	2	50	47	14	5	.	.	112
2.50-2.99	7	6	1	.	.	45
3.00-3.49	14
3.50-3.99	0
4.00-4.49	2	.	2
4.50-4.99	1	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	388	2214	1995	632	353	271	43	9	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5538.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	432	1268	357	71	23	8	.	.	.	.	2159
0.50-0.99	.	1208	1119	174	73	50	4	.	.	.	2628
1.00-1.49	.	.	578	96	58	28	6	.	.	.	766
1.50-1.99	.	.	102	111	43	45	14	1	.	.	316
2.00-2.49	.	.	2	102	6	23	19	6	.	.	158
2.50-2.99	.	.	.	26	4	16	16	9	.	.	71
3.00-3.49	.	.	.	1	6	1	2	10	.	.	20
3.50-3.99	1	.	.	4	.	.	6
4.00-4.49	5	.	.	1	.	6
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	432	2476	2158	581	214	176	61	30	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 5749.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	789	2255	542	27	11	3	.	.	.	.	3627
0.50-0.99	.	2522	2364	291	33	13	5	1	.	.	5229
1.00-1.49	.	.	1072	171	54	13	3	3	.	.	1316
1.50-1.99	.	.	192	226	36	32	8	8	3	.	505
2.00-2.49	.	.	7	146	10	16	8	5	3	1	196
2.50-2.99	.	.	.	29	25	5	3	4	4	.	71
3.00-3.49	.	.	.	1	19	13	3	2	2	1	37
3.50-3.99	7	7	1	.	.	.	9
4.00-4.49	1	1	1	.	1	.	3
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	789	4777	4177	891	189	103	29	24	13	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 10299.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1021	2844	463	9	2	.	.	.	.	.	4339
0.50-0.99	.	3938	833	387	18	.	.	.	.	.	5176
1.00-1.49	.	.	1303	70	24	2	.	.	.	.	1399
1.50-1.99	.	.	419	41	34	11	.	1	.	.	506
2.00-2.49	.	.	38	28	4	6	2	.	1	.	79
2.50-2.99	.	.	.	4	8	.	1	.	.	.	13
3.00-3.49	1	.	.	1
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	1	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1021	6782	3056	539	90	20	4	2	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 10777.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	681	1492	264	18	1	.	.	.	.	.	2456
0.50-0.99	.	1900	533	84	11	2	.	.	.	.	2530
1.00-1.49	.	.	1237	18	21	4	1	.	.	.	1282
1.50-1.99	.	.	587	2	5	7	.	.	.	.	601
2.00-2.49	.	.	49	59	2	2	.	.	.	.	110
2.50-2.99	.	.	.	17	.	.	.	1	.	.	18
3.00-3.49	.	.	.	1	.	.	1	.	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	681	3392	2670	199	38	16	2	1	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 6552.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	308	781	146	5	1	.	.	.	.	.	1241
0.50-0.99	.	1482	595	63	18	1	.	.	.	.	2159
1.00-1.49	.	.	835	21	13	11	.	.	.	.	880
1.50-1.99	.	.	649	83	4	5	.	.	.	.	741
2.00-2.49	.	.	20	151	3	4	1	.	.	.	179
2.50-2.99	.	.	.	32	.	.	2	.	.	.	34
3.00-3.49	.	.	.	4	1	.	.	.	.	.	7
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	308	2263	2245	359	37	20	4	5	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 4909.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	166	527	132	4	1	.	.	.	.	.	830
0.50-0.99	.	1536	980	88	18	1	.	.	.	.	2623
1.00-1.49	.	.	938	24	37	6	.	.	.	.	1005
1.50-1.99	.	.	978	181	7	12	3	.	.	.	1181
2.00-2.49	.	.	.	185	1	3	.	.	.	.	189
2.50-2.99	.	.	.	43	.	.	.	.	.	.	43
3.00-3.49	.	.	.	3	3	.	.	.	.	.	6
3.50-3.99	2	.	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	166	2063	3028	528	69	22	3	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 5508.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

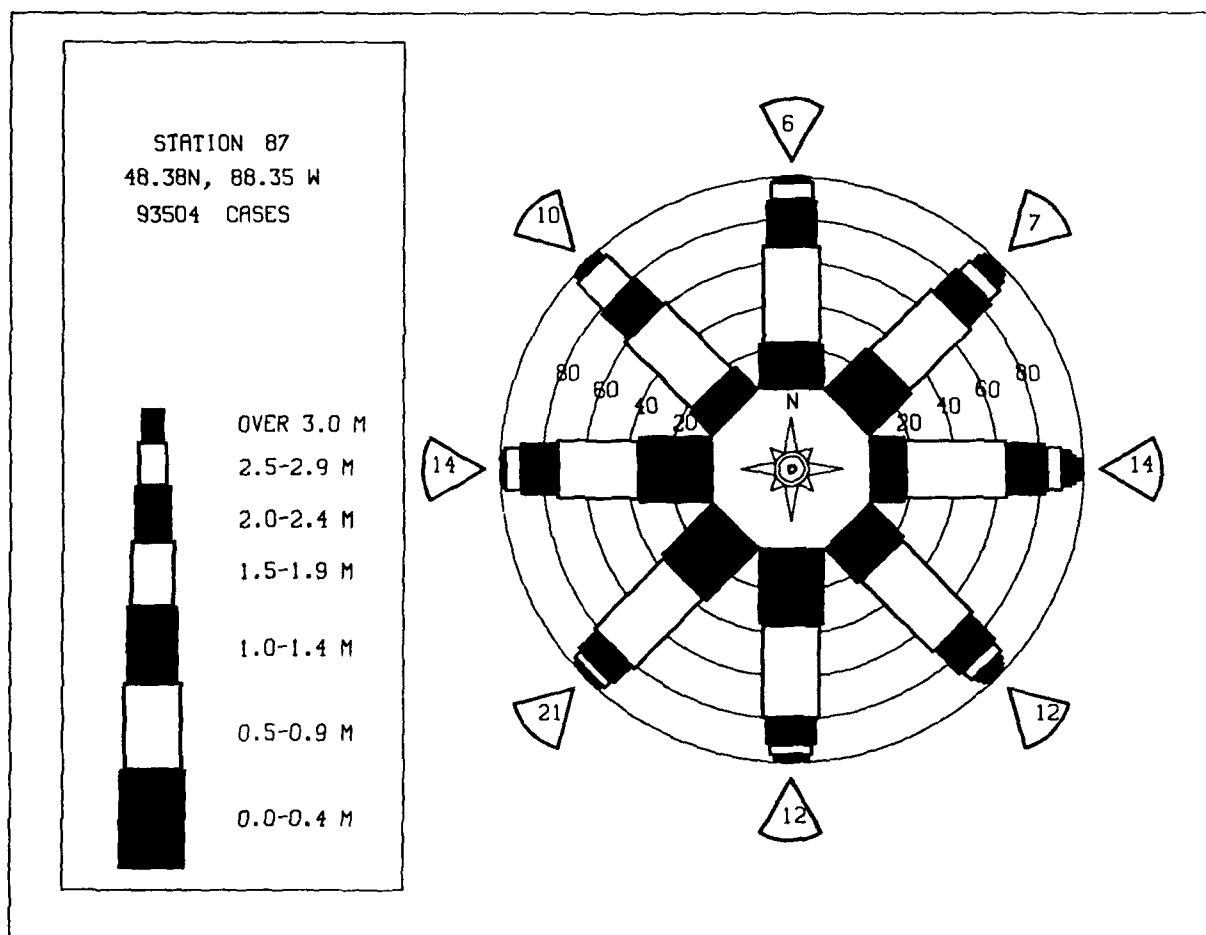
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	133	410	73	2	.	.	.	.	.	.	618
0.50-0.99	.	1281	582	131	16	2	.	.	.	.	2012
1.00-1.49	.	.	820	56	32	6	2	.	.	.	916
1.50-1.99	.	.	464	57	10	11	1	.	.	.	543
2.00-2.49	.	.	6	60	2	1	.	.	.	.	69
2.50-2.99	.	.	.	6	.	1	.	.	.	.	7
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	133	1691	1945	312	60	21	3	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 3904.

STATION S87 48.38N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0 3.9	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	590	1616	431	63	9	1	.	.	.	.	2710
0.50-0.99	.	2115	1842	395	111	23	1	.	.	.	4487
1.00-1.49	.	.	1081	285	130	48	2	.	.	.	1546
1.50-1.99	.	.	389	235	77	61	6	1	.	.	769
2.00-2.49	.	.	14	138	45	42	11	1	.	.	251
2.50-2.99	.	.	.	18	54	22	10	4	.	.	108
3.00-3.49	.	.	.	1	11	29	5	5	.	.	51
3.50-3.99	16	3	3	.	.	22
4.00-4.49	4	7	1	1	.	13
4.50-4.99	4	2	.	.	6
5.00-5.49	2	1	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	590	3731	3757	1135	437	246	49	19	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S87 (48.38N 88.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.9	1.0	1.0	0.8	0.8	0.6	0.5	0.5	0.6	1.0	1.0	0.9	0.8
1957	0.9	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.7	0.7	1.1	1.0	0.8
1958	0.8	1.0	0.7	0.9	0.7	0.6	0.6	0.6	0.8	0.8	1.2	0.9	0.8
1959	0.9	0.9	0.9	0.8	0.9	0.6	0.6	0.6	0.8	0.8	1.0	1.1	0.8
1960	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.8	1.0	0.9	0.7
1961	0.7	0.9	0.9	0.7	0.7	0.7	0.4	0.4	0.7	0.8	0.9	0.9	0.7
1962	1.1	0.9	0.8	0.7	0.8	0.5	0.4	0.5	0.7	0.7	1.0	1.0	0.8
1963	0.9	1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.7	0.7	1.0	1.2	0.8
1964	1.1	0.9	1.0	0.9	0.7	0.5	0.5	0.6	0.7	0.7	1.0	0.9	0.8
1965	1.2	1.2	1.0	0.8	0.7	0.6	0.5	0.5	0.7	1.0	1.4	1.3	0.9
1966	1.3	1.3	1.9	1.2	1.1	0.8	0.7	0.8	1.0	1.3	1.3	1.3	1.2
1967	1.4	1.3	1.5	1.2	1.1	0.9	0.7	0.7	1.0	1.6	1.1	1.7	1.1
1968	1.3	1.4	1.4	1.3	1.1	0.9	0.8	0.8	1.0	1.4	1.5	1.5	1.2
1969	1.5	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.8	1.0	1.0	0.6	0.9
1970	0.9	0.9	1.0	1.0	0.9	0.6	0.5	0.5	0.9	1.4	1.1	1.0	0.9
1971	1.0	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	1.2	1.0	0.9	0.8
1972	1.0	0.9	1.0	0.7	0.5	0.5	0.4	0.5	0.9	1.0	0.9	1.0	0.8
1973	0.9	0.9	1.0	0.8	0.7	0.6	0.5	0.4	0.8	0.9	1.1	0.9	0.8
1974	0.9	0.8	1.0	0.8	0.7	0.6	0.5	0.7	0.6	0.9	1.1	0.9	0.8
1975	0.8	0.7	0.8	0.5	0.6	0.6	0.5	0.6	0.7	1.1	1.1	0.9	0.7
1976	1.0	1.0	1.2	0.7	0.7	0.6	0.5	0.5	0.7	0.8	0.9	0.9	0.8
1977	1.0	1.1	1.3	0.6	0.7	0.5	0.5	0.5	0.7	0.7	0.9	1.3	0.8
1978	0.7	0.6	0.8	0.8	0.6	0.5	0.5	0.6	0.9	0.7	0.9	0.9	0.7
1979	0.7	0.8	0.9	0.7	0.6	0.6	0.4	0.5	0.7	0.9	1.0	0.9	0.7
1980	0.9	0.7	0.8	0.7	0.6	0.5	0.4	0.6	0.9	1.0	0.7	1.0	0.7
1981	0.8	0.9	0.9	0.8	0.6	0.6	0.4	0.4	0.8	1.1	0.9	0.7	0.7
1982	1.1	0.8	1.1	0.9	0.8	0.5	0.5	0.5	0.8	1.1	1.1	1.1	0.9
1983	1.0	1.0	1.3	0.8	0.7	0.5	0.5	0.5	0.8	0.9	1.4	1.2	0.9
1984	1.0	1.0	1.0	1.0	0.6	0.6	0.5	0.5	0.9	1.2	1.3	1.0	0.9
1985	1.0	0.9	1.3	0.9	0.7	0.7	0.5	0.6	0.9	1.1	1.0	1.0	0.9
1986	1.1	0.9	1.0	0.9	0.7	0.6	0.5	0.5	0.9	0.8	1.1	0.9	0.8
1987	0.7	0.8	1.0	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.8	0.7	0.6
MEAN	1.0	0.9	1.0	0.8	0.7	0.6	0.5	0.5	0.8	1.0	1.1	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S87 (48.38N 88.35W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.0	3.7	5.3	3.0	2.4	1.6	1.8	1.8	2.2	3.2	3.3	3.4	
1957	2.3	2.4	3.1	3.3	2.5	2.2	1.6	1.8	2.3	2.2	3.1	2.5	
1958	2.5	3.1	1.8	3.3	2.2	2.4	1.7	1.9	2.2	2.4	4.3	2.2	
1959	2.1	2.7	2.9	2.4	2.5	1.4	2.1	1.6	2.4	2.4	2.6	4.2	
1960	2.5	2.3	2.6	2.7	1.5	1.5	1.6	2.0	1.9	2.6	4.0	2.8	
1961	1.1	3.2	2.7	2.6	2.1	1.6	1.5	1.6	2.5	2.1	3.7	2.7	
1962	2.8	3.4	3.0	2.0	2.4	1.3	1.7	1.5	2.0	4.6	3.0	3.2	
1963	2.3	2.9	3.3	2.4	2.3	3.3	1.5	1.9	2.2	1.1	3.2	4.7	
1964	4.0	2.9	3.3	2.7	1.7	1.7	1.3	2.5	2.4	2.5	3.6	3.5	
1965	4.0	4.1	3.9	3.2	1.8	1.6	1.3	1.6	2.7	2.6	6.4	5.5	
1966	4.4	3.3	5.1	3.0	2.3	2.2	2.2	2.9	2.3	3.3	4.7	4.2	
1967	5.5	3.3	5.1	3.1	4.2	3.1	2.1	2.3	3.1	5.3	3.4	3.6	
1968	3.5	3.7	4.1	3.9	3.5	2.5	2.8	2.4	2.6	6.3	4.9	5.7	
1969	4.8	3.3	3.0	2.3	2.9	3.4	1.2	2.5	2.4	3.3	3.3	4.4	
1970	2.1	2.2	6.0	4.0	2.6	1.6	1.4	1.8	3.9	5.5	3.2	4.0	
1971	2.1	3.6	3.9	2.4	3.7	2.2	1.7	1.3	2.5	4.8	4.5	3.6	
1972	2.3	3.3	3.6	2.5	1.4	1.2	1.3	1.8	3.5	2.7	2.8	4.5	
1973	3.3	2.5	2.8	2.2	2.6	2.0	3.3	1.3	3.7	2.9	3.4	3.0	
1974	2.8	2.2	3.9	2.5	2.8	2.1	1.5	2.2	1.7	2.4	4.8	3.9	
1975	3.9	1.9	2.8	1.3	1.9	1.4	1.5	2.3	3.0	4.3	5.2	3.5	
1976	3.9	2.9	4.0	2.1	1.7	2.1	1.7	1.6	2.3	2.2	2.2	2.9	
1977	3.3	4.7	4.5	2.2	2.3	1.5	0.8	1.5	4.4	3.1	4.4	5.5	
1978	2.5	3.5	3.6	2.2	2.2	2.0	2.2	1.6	3.2	2.5	2.9	5.0	
1979	2.2	3.2	2.7	4.1	2.7	3.2	2.5	1.6	2.2	3.6	2.7	2.4	
1980	1.1	2.4	3.7	2.2	1.5	1.5	0.9	1.4	3.2	4.4	3.5	2.1	
1981	5.6	2.4	3.4	2.9	2.6	2.2	1.5	1.5	2.8	4.3	3.3	3.3	
1982	2.8	2.4	5.2	3.0	1.9	1.5	1.7	1.7	2.5	4.0	5.2	3.7	
1983	2.8	3.3	3.3	3.2	2.2	2.2	1.3	1.7	3.8	5.1	2.9	2.9	
1984	4.3	3.8	6.3	3.0	2.3	2.4	3.3	3.1	2.8	6.2	3.2	3.0	
1985	3.8	2.9	3.1	3.0	2.3	1.4	1.5	1.5	3.5	3.7	5.8	2.2	
1986	3.1	2.4	4.2	2.4	1.8	0.8	1.4	1.0	1.6	1.9	2.6	2.3	
1987	2.1	4.5	4.2	2.4	1.8	0.8	1.4	1.0	1.6	1.9	2.6	2.3	

32 YR. STATISTICS FOR WIS STATION S87

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	66030418

STATION S88 48.23N 80.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	143	520	112	9							784
0.50-0.99		1043	435	205	35	2					1720
1.00-1.49			481	162	57	19					719
1.50-1.99			185	23	52	38					298
2.00-2.49			16	8	13	23					60
2.50-2.99				2	1	5	1				9
3.00-3.49				1		4	1	2			8
3.50-3.99							1				1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	143	1563	1229	410	158	91	3	2	0	0	
MEAN HS(M) = 0.8	LARGEST HS(M)=		3.6	MEAN TP(SEC)=		3.9	NO. OF CASES=		3375.		

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	220	485	113	4							822
0.50-0.99		852	567	145	19	1	.	.	.	.	1584
1.00-1.49	.	.	310	189	44	8	.	.	.	.	551
1.50-1.99	.	.	59	154	50	12	1	.	.	.	276
2.00-2.49	.	.	1	80	53	12	.	.	.	.	146
2.50-2.99	.	.	.	3	56	6	1	.	.	.	66
3.00-3.49	.	.	.	.	6	26	.	.	.	.	32
3.50-3.99	.	.	.	.	.	13	.	.	.	.	14
4.00-4.49	.	.	.	.	.	1	2	.	.	.	2
4.50-4.99	.	.	.	.	.	.	2	.	.	.	2
5.00-5.49	.	.	.	.	.	.	.	1	.	.	1
5.50-5.99	.	.	.	.	.	.	.	1	.	.	1
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	220	1337	1050	575	228	79	7	2	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M)= 5.9		MEAN TP(SEC)= 4.0		NO. OF CASES= 3283.						

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	334	767	130	9							1240
0.50-0.99	.	950	829	149	23	3	.	.	.	.	1954
1.00-1.49	.	.	333	187	27	7	1	.	.	.	555
1.50-1.99	.	.	31	196	45	4					276
2.00-2.49	.	.	.	74	51	10	1	1	.	.	137
2.50-2.99	.	.	.	2	86	10		.	.	.	98
3.00-3.49	4	57	3	.	.	.	64
3.50-3.99	23	1	1	.	.	27
4.00-4.49	2	2	.	.	.	4
4.50-4.99	1	3	1	.	.	3
5.00-5.49		2	.	.	.	2
5.50-5.99		1	1	.	.	1
6.00-6.49	1	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	334	1717	1323	617	236	117	13	5	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M)=		6.3	MEAN TP(SEC)=		4.0	NO. OF CASES=		4094.		

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	352	1136	154	4							1646
0.50-0.99		1122	1281	217	33	3	.	.	.	.	2656
1.00-1.49			432	397	51	26	2	.	.	.	908
1.50-1.99			40	220	91	18	2	.	.	.	371
2.00-2.49			5	56	154	28	4	2	.	.	249
2.50-2.99				1	47	77		.	.	.	125
3.00-3.49					7	56	11	.	.	.	74
3.50-3.99					1	20	26	5	.	.	48
4.00-4.49						2	5	1	.	.	12
4.50-4.99							3	3	2	.	8
5.00-5.49								1	1	.	2
5.50-5.99										.	1
6.00-6.49								1	.	.	0
6.50-6.99								.	.	.	0
7.00+								.	.	.	0
TOTAL	352	2258	1912	895	384	230	53	13	3	0	
MEAN HS(M) = 0.9	LARGEST HS(M)= 5.6		MEAN TP(SEC)= 4.1		NO. OF CASES= 5718.						

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	378	1661	235	12	45	6	.	.	.	.	2286
0.50-0.99	.	2007	2389	365	730	42	1	.	.	.	4812
1.00-1.49	.	.	589	247	133	58	7	.	.	.	1495
1.50-1.99	.	.	24	16	126	58	11	4	.	.	462
2.00-2.49	.	.	.	1	132	59	11	4	.	.	224
2.50-2.99	11	88	6	2	.	.	110
3.00-3.49	33	19	2	.	.	54
3.50-3.99	2	19	4	.	.	25
4.00-4.49	1	1	3	1	.	6
4.50-4.99	2	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	378	3668	3239	1371	447	289	64	19	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 8876.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	203	572	97	2	24	.	.	.	.	.	874
0.50-0.99	.	768	978	116	24	.	.	.	.	.	1886
1.00-1.49	.	.	268	214	67	18	.	.	.	.	567
1.50-1.99	.	.	19	88	48	43	2	.	.	.	202
2.00-2.49	.	.	.	25	38	33	2	.	.	.	106
2.50-2.99	.	.	.	1	14	25	4	3	.	.	47
3.00-3.49	1	8	3	1	1	.	14
3.50-3.99	3	1	.	.	8
4.00-4.49	1	.	.	.	1
4.50-4.99	1	.	1
5.00-5.49	0
5.50-5.99	3	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	203	1340	1362	446	192	129	23	9	7	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 3483.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	168	511	367	168	16	1	.	.	.	.	1231
0.50-0.99	.	928	624	409	271	93	3	.	.	.	2328
1.00-1.49	.	.	186	74	79	86	17	2	.	.	444
1.50-1.99	.	.	23	58	20	39	8	1	1	.	150
2.00-2.49	.	.	.	21	8	13	6	9	.	.	57
2.50-2.99	.	.	.	4	11	9	4	5	1	.	34
3.00-3.49	3	7	1	.	1	.	12
3.50-3.99	8	3	4	4	.	19
4.00-4.49	3	2	2	.	7
4.50-4.99	3	1	.	.	4
5.00-5.49	0
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	168	1439	1200	734	408	256	48	24	10	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4026.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	258	920	250	159	79	10	.	.	.	.	1676
0.50-0.99	.	1205	440	188	179	124	7	.	.	.	2143
1.00-1.49	.	.	233	50	51	57	17	4	2	.	414
1.50-1.99	.	.	29	11	12	27	9	2	.	.	90
2.00-2.49	.	.	1	8	4	7	7	8	.	.	35
2.50-2.99	5	5	1	3	7	.	21
3.00-3.49	1	.	1	5	.	7
3.50-3.99	1	1	.	.	2
4.00-4.49	1	.	1
4.50-4.99	0
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	258	2125	953	416	330	231	42	19	16	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 4120.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	250	826	73	2	2	2	.	.	.	.	1155
0.50-0.99	.	996	360	66	34	18	.	.	.	.	1474
1.00-1.49	.	.	206	19	38	42	3	.	.	.	308
1.50-1.99	.	.	43	2	3	12	11	3	.	.	74
2.00-2.49	.	.	3	2	.	3	7	9	3	.	27
2.50-2.99	4	1	.	5
3.00-3.49	1	1	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	250	1822	685	91	77	77	21	18	6	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 2860.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	223	826	97	3	.	.	.	.	.	.	1149
0.50-0.99	.	1073	448	62	16	3	1	.	.	.	1603
1.00-1.49	.	.	243	27	14	20	4	2	.	.	310
1.50-1.99	.	.	67	12	2	13	9	2	.	.	105
2.00-2.49	.	.	2	12	.	.	2	8	1	.	25
2.50-2.99	.	.	.	1	.	.	.	.	1	.	2
3.00-3.49	1	.	.	1	.	.	2
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	223	1899	857	117	33	36	16	13	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 2999.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	305	1409	167	8	.	.	.	.	.	.	1889
0.50-0.99	.	1531	1593	74	17	1	1	.	.	.	3217
1.00-1.49	.	.	505	103	27	19	1	.	.	.	655
1.50-1.99	.	.	113	117	16	19	3	1	.	.	269
2.00-2.49	.	.	5	55	2	8	4	1	.	.	73
2.50-2.99	.	.	.	3	5	.	.	.	1	.	9
3.00-3.49	.	.	.	1	1	.	.	.	.	.	3
3.50-3.99	1	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	305	2940	2383	362	68	48	9	2	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 5733.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	445	2481	156	4	.	.	.	.	.	.	3086
0.50-0.99	.	2675	4391	100	22	2	.	.	.	.	7190
1.00-1.49	.	.	244	48	10	1	.	.	.	.	2502
1.50-1.99	.	.	206	614	63	16	8	.	.	.	907
2.00-2.49	.	.	1	275	44	50	13	4	.	.	387
2.50-2.99	.	.	.	17	97	9	8	8	2	.	141
3.00-3.49	26	3	2	7	3	.	41
3.50-3.99	1	6	.	1	.	.	8
4.00-4.49	3	.	.	.	.	3
4.50-4.99	1	.	1	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	445	5156	6953	1254	301	99	33	20	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 13356.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	526	1732	114	7							2379
0.50-0.99		1842	3380	120	25	4					5371
1.00-1.49			2869	55	17	19	1				2961
1.50-1.99			290	1395	4	3	1				1693
2.00-2.49				1	1300		3	1			1309
2.50-2.99					106						445
3.00-3.49						339					110
3.50-3.99						108		1			43
4.00-4.49						5	37	1			14
4.50-4.99							12		2		5
5.00-5.49							5				0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	526	3574	6654	2983	502	81	5	3	2	0	
MEAN HS (M) = 1.1	LARGEST HS (M) = 4.9		MEAN TP (SEC) = 4.2		NO. OF CASES = 13411.						

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	270	1068	88	7							1433
0.50-0.99		1726	1530	71	18	1	.	.	.	.	3346
1.00-1.49	.	.	1983	40	28	14	.	.	.	.	2065
1.50-1.99	.	.	930	764	6	3	.	1	.	.	1704
2.00-2.49	.	.	9	830	1	.	1	.	.	.	841
2.50-2.99	.	.	.	116	231	.	.	1	.	.	348
3.00-3.49	.	.	.	1	126	.	.	.	.	.	127
3.50-3.99	.	.	.	.	1	54	.	.	.	.	55
4.00-4.49	.	.	.	.	2	13	.	.	.	.	17
4.50-4.99	.	.	.	.	.	7	.	.	.	.	3
5.00-5.49	.	.	.	.	.	.	3	.	.	.	0
5.50-5.99	.	.	.	.	.	.	.	.	.	.	0
6.00-6.49	.	.	.	.	.	.	.	.	.	.	0
6.50-6.99	.	.	.	.	.	.	.	.	.	.	0
7.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	270	2794	4540	1829	413	92	4	2	0	0	
MEAN HS(M) = 1.2	LARGEST HS(M)=		5.3	MEAN TP(SEC)=		4.2	NO. OF CASES=		9311.		

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	173	532	97	10	1	.	.	.	.	.	813
0.50-0.99	.	1577	851	91	28	3	.	.	.	.	2550
1.00-1.49	.	.	1093	34	28	18	1	.	.	.	1174
1.50-1.99	.	.	736	139	6	7	1	.	.	.	889
2.00-2.49	.	.	.	164	.	1	.	1	.	.	166
2.50-2.99	.	.	.	27	.	.	.	.	.	.	27
3.00-3.49	.	.	.	1	6	.	.	.	.	.	7
3.50-3.99	1	.	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	173	2109	2777	466	70	29	2	1	0	0	
MEAN HS(M) = 1.0	LARGEST HS(M)=		3.7	MEAN TP(SEC)=		3.8	NO. OF CASES=		5271.		

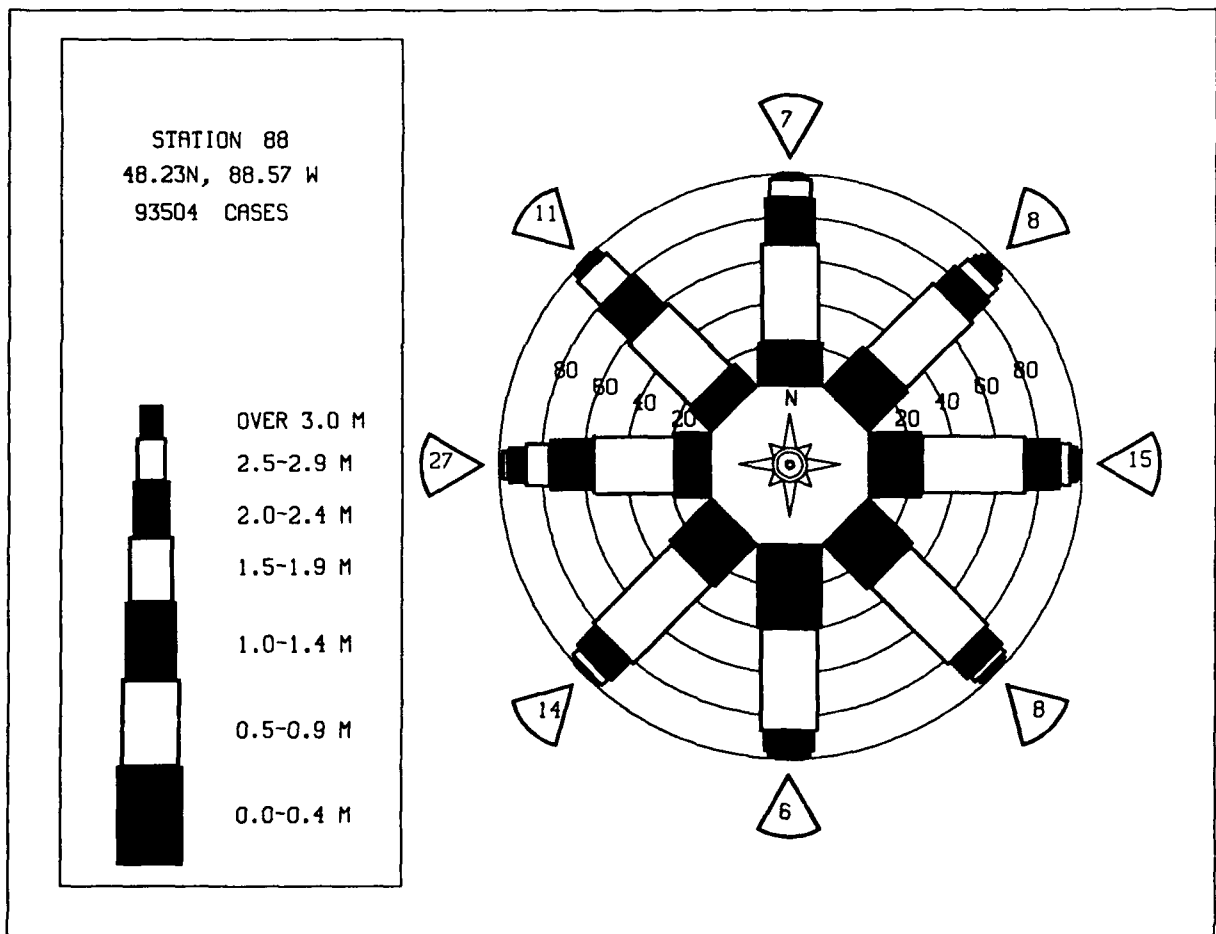
STATION S88 48.23N 88.57W AZIMUTH(DEGREES) -337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	111	378	79	2							570
0.50-0.99		1074	497	136	31	1					1739
1.00-1.49			795	60	48	16	2				921
1.50-1.99			435	35	23	16	1	1			511
2.00-2.49			9	63		4					76
2.50-2.99				9			2				11
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	111	1452	1815	306	102	37	5	1	0	0	
MEAN HS(M) = 0.9	LARGEST HS(M)=		3.0	MEAN TP(SEC)=		3.9	NO. OF CASES=		3588.		

STATION S88 48.23N 88.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	436	1583	233	41	9	1					2303
0.50-0.99		2137	2060	252	82	26	1				4558
1.00-1.49			1273	259	76	42	5				1655
1.50-1.99			323	408	57	33	6	1			828
2.00-2.49			5	299	50	23	7	5			391
2.50-2.99				29	90	23	2	2	1		147
3.00-3.49					29	19	4	1			54
3.50-3.99						16	6	1			23
4.00-4.49						1	1				2
4.50-4.99							1				1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	436	3720	3894	1288	393	188	33	11	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S88 (48.23N 88.57W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	1.2	1.1	0.9	0.8	0.6	0.6	0.6	0.6	1.0	1.1	1.0	0.9
1957	1.1	1.1	0.9	0.8	0.8	0.7	0.5	0.6	0.8	0.8	1.2	1.1	0.9
1958	0.9	1.1	0.7	0.8	0.8	0.7	0.6	0.7	0.8	0.8	1.3	1.1	0.9
1959	1.1	1.1	1.0	0.9	0.9	0.6	0.7	0.6	0.9	0.9	1.2	1.1	0.9
1960	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.8	1.2	1.1	0.8
1961	0.9	0.9	0.8	0.8	0.7	0.6	0.4	0.5	0.8	0.8	1.0	1.1	0.8
1962	1.3	0.9	0.8	0.8	0.7	0.5	0.5	0.6	0.8	0.9	1.0	1.2	0.8
1963	1.2	1.1	1.0	0.8	0.7	0.6	0.5	0.6	0.7	0.8	1.1	1.4	0.9
1964	1.2	1.0	1.0	0.8	0.7	0.5	0.5	0.6	0.8	0.7	1.0	1.1	0.8
1965	1.3	1.4	1.0	0.8	0.7	0.7	0.5	0.5	0.8	1.0	1.5	1.4	1.0
1966	1.5	1.4	1.1	1.2	1.2	1.2	0.8	0.8	1.1	1.4	1.4	1.5	1.2
1967	1.5	1.3	1.5	1.2	1.1	0.9	0.8	0.8	1.1	1.5	1.3	1.8	1.2
1968	1.3	1.7	1.5	1.3	1.0	0.9	0.9	0.9	1.1	1.3	1.6	1.6	1.3
1969	1.5	1.0	1.1	0.8	0.8	0.7	0.5	0.7	0.8	1.1	1.1	0.9	0.9
1970	1.0	1.0	1.1	0.8	0.9	0.6	0.6	0.6	0.8	1.1	1.1	1.1	0.9
1971	1.1	1.1	1.0	0.9	0.5	0.5	0.6	0.5	0.7	1.1	1.0	1.0	0.9
1972	1.2	1.0	1.0	0.7	0.5	0.5	0.5	0.5	0.9	1.0	0.9	1.1	0.8
1973	1.1	0.9	0.9	0.8	0.7	0.6	0.5	0.4	0.8	0.9	1.2	1.1	0.8
1974	1.1	0.8	0.8	0.7	0.7	0.6	0.5	0.7	0.7	1.1	1.2	0.9	0.8
1975	1.1	0.9	1.0	0.8	0.6	0.6	0.5	0.6	0.7	1.0	1.1	0.9	0.8
1976	1.1	1.0	1.1	0.8	0.6	0.6	0.5	0.5	0.7	1.1	1.2	1.1	0.8
1977	1.3	1.2	1.2	0.8	0.7	0.5	0.5	0.6	0.7	0.9	1.4	1.4	0.9
1978	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.6	0.8	0.7	1.0	1.1	0.8
1979	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.7	0.8	1.0	1.0	0.7
1980	0.9	0.7	0.8	0.6	0.6	0.5	0.5	0.6	0.9	1.1	1.1	1.2	0.8
1981	0.9	0.9	1.1	0.8	0.6	0.6	0.5	0.5	0.8	0.9	0.9	0.9	0.8
1982	1.3	0.9	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.1	1.2	0.9
1983	1.1	1.0	1.1	0.8	0.7	0.5	0.5	0.5	0.9	0.9	1.4	1.4	0.9
1984	1.1	1.0	1.1	0.8	0.7	0.5	0.6	0.5	0.9	0.9	1.3	1.1	0.9
1985	1.1	1.0	1.1	0.8	0.7	0.6	0.7	0.6	0.8	1.1	1.1	1.3	1.0
1986	1.1	0.9	1.1	0.8	0.7	0.8	0.6	0.6	0.9	1.1	1.1	1.1	0.9
1987	0.7	0.8	0.9	0.5	0.5	0.3	0.4	0.4	0.4	0.7	0.8	0.8	0.6
MEAN	1.1	1.0	1.0	0.8	0.7	0.6	0.5	0.6	0.8	1.0	1.1	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S88 (48.23N 88.57W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	3.0	3.0	3.2	2.6	1.8	3.0	2.1	2.2	3.3	3.9	3.9	
1957	2.2	2.3	3.0	3.2	3.0	2.5	2.2	2.2	2.2	2.2	3.4	3.2	
1958	2.2	2.7	3.3	3.3	3.1	2.4	2.2	2.2	2.2	2.2	3.4	3.3	
1959	2.2	2.8	3.3	3.3	3.3	2.1	2.2	2.2	2.2	2.2	3.4	3.3	
1960	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1961	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1962	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1963	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1964	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1965	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1966	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1967	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1968	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1969	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1970	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1971	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1972	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1973	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1974	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1975	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1976	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1977	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1978	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1979	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1980	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1981	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1982	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1983	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1984	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1985	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1986	2.2	2.8	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	3.3	3.3	
1987	2.1	3.7	3.6	1.9	1.7	1.2	1.3	1.7	1.5	2.0	2.1	2.5	

32 YR. STATISTICS FOR WIS STATION S88

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS (METERS)	0.6
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.2
LARGEST WAVE HS (METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	9.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	35.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	68121318

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	206	587	104	29	47	6	.	.	.	.	926
0.50-0.99	.	1299	364	182	47	6	.	.	.	.	1898
1.00-1.49	.	.	576	120	80	16	.	.	.	.	792
1.50-1.99	.	.	185	7	47	51	2	.	.	.	292
2.00-2.49	.	.	10	10	7	27	.	.	.	.	54
2.50-2.99	.	.	.	2	.	2	3	1	.	.	8
3.00-3.49	.	.	.	2	.	.	3	1	.	.	6
3.50-3.99	1	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	206	1886	1239	352	181	102	9	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 3729.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	240	626	112	10	1	.	.	.	.	.	989
0.50-0.99	.	1225	440	162	33	4	.	.	.	.	1864
1.00-1.49	.	.	303	213	56	6	1	.	.	.	579
1.50-1.99	.	.	106	73	103	19	.	1	.	.	302
2.00-2.49	.	.	3	16	49	52	.	.	.	.	120
2.50-2.99	.	.	.	5	.	36	2	.	.	.	43
3.00-3.49	.	.	.	1	1	4	4	3	.	.	13
3.50-3.99	1	1	2	.	.	4
4.00-4.49	1	3	.	.	4
4.50-4.99	1	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	240	1851	964	480	243	122	9	10	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3677.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	368	942	105	21	2	1	.	.	.	.	1439
0.50-0.99	.	1489	546	143	26	4	1	.	.	.	2209
1.00-1.49	.	.	253	174	26	3	.	.	.	.	472
1.50-1.99	.	.	39	96	54	8	2	1	.	.	199
2.00-2.49	.	.	2	6	66	8	1	.	.	.	83
2.50-2.99	.	.	.	4	3	54	4	.	.	.	65
3.00-3.49	14	6	.	.	.	20
3.50-3.99	1	1	1	.	.	3
4.00-4.49	1	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	368	2431	945	444	177	104	18	3	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4212.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	266	757	98	13	2	.	.	.	.	.	1136
0.50-0.99	.	2028	1181	155	41	14	.	.	.	.	3419
1.00-1.49	.	.	586	209	41	32	1	.	.	.	869
1.50-1.99	.	.	211	173	60	8	3	2	.	.	457
2.00-2.49	.	.	2	96	120	27	.	.	.	.	245
2.50-2.99	.	.	.	23	14	72	4	.	.	.	113
3.00-3.49	.	.	.	7	9	31	16	1	.	.	64
3.50-3.99	8	6	8	.	.	.	22
4.00-4.49	5	2	.	.	8
4.50-4.99	1	.	2	1	.	5
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	266	2785	2078	676	295	191	37	8	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 5944.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	270	674	115	24	62	19	1	.	.	.	1083
0.50-0.99	.	2948	2794	281	101	58	3	.	.	.	6105
1.00-1.49	.	.	1166	371	101	58	3	.	.	.	1698
1.50-1.99	.	.	303	198	89	38	14	4	.	.	646
2.00-2.49	.	.	1	98	84	48	6	2	1	.	240
2.50-2.99	.	.	.	27	2	81	6	1	.	.	117
3.00-3.49	.	.	.	2	4	25	13	1	.	.	45
3.50-3.99	1	2	10	5	1	.	19
4.00-4.49	3	.	.	2	.	.	5
4.50-4.99	2	.	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	270	3622	4379	1001	346	273	53	15	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9331.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	156	272	60	5	22	6	.	.	.	.	493
0.50-0.99	.	1083	903	93	39	6	1	.	.	.	2107
1.00-1.49	.	.	360	119	29	20	1	.	.	.	539
1.50-1.99	.	.	79	74	25	14	5	2	.	.	199
2.00-2.49	.	.	.	40	31	21	3	4	.	.	99
2.50-2.99	.	.	.	8	8	18	1	2	2	.	39
3.00-3.49	.	.	.	1	1	.	8	1	2	.	13
3.50-3.99	2	1	1	.	4
4.00-4.49	1	1	1	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	156	1355	1402	340	126	79	20	11	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 3281.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	147	465	137	98	43	8	.	.	.	.	898
0.50-0.99	.	1165	387	99	102	60	12	4	.	.	1829
1.00-1.49	.	.	199	49	33	24	5	1	.	.	311
1.50-1.99	.	.	41	22	16	14	6	1	.	.	100
2.00-2.49	.	.	2	6	12	5	6	4	1	.	36
2.50-2.99	1	7	2	4	2	.	12
3.00-3.49	1	3	1	1	3	.	10
3.50-3.99	1	1	1	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	147	1630	766	274	208	121	33	13	7	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3007.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	231	768	101	24	14	13	.	.	.	.	1151
0.50-0.99	.	1209	335	51	47	38	2	4	.	.	1686
1.00-1.49	.	.	182	33	17	32	4	5	.	.	273
1.50-1.99	.	.	27	2	7	18	6	8	2	.	70
2.00-2.49	.	.	1	2	3	7	2	7	4	.	26
2.50-2.99	1	4	.	5
3.00-3.49	1	1	.	2
3.50-3.99	1	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	231	1977	646	112	88	108	14	26	12	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 3018.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	242	729	73	6	2						1052
0.50-0.99		1041	374	67	23	12					1517
1.00-1.49			205	19	22	17	9	2			274
1.50-1.99			33	2	3	8	6	8	1		61
2.00-2.49			2			1		3	3		12
2.50-2.99							1				1
3.00-3.49								1	1		2
3.50-3.99									1		1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	242	1770	687	97	50	38	16	14	6	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 2740.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	217	835	85	9							1146
0.50-0.99		1189	943	52	21	7	1				2213
1.00-1.49			502	33	9	24	4				572
1.50-1.99			78	37		4		9	6		158
2.00-2.49				31				2			33
2.50-2.99				3	2						5
3.00-3.49					1			1	1		3
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	217	2024	1608	185	33	35	9	12	7	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 3870.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	388	1369	136	10	1						1904
0.50-0.99		1428	2720	59	23	9	2				4241
1.00-1.49			1300	77	19	12	2				1411
1.50-1.99			177	276	40	7	3				507
2.00-2.49				182	12	20	3				218
2.50-2.99				36	14	13	11				76
3.00-3.49					7	2	2		1		17
3.50-3.99					3						3
4.00-4.49						2					2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	388	2797	4333	640	119	65	23	14	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 7853.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	582	1582	135	13							2312
0.50-0.99		2970	3983	90	27	8	1				7079
1.00-1.49			2234	101	14	12	4				2363
1.50-1.99			382	364	28	5	2				982
2.00-2.49			1	340	28	16	1		2		388
2.50-2.99				39	36	21	10		1		108
3.00-3.49					22	9	8				44
3.50-3.99					5	6	1		4		18
4.00-4.49						3					3
4.50-4.99									1		1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	582	4552	6735	1147	160	83	27	12	10	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 12463.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	626	1027	130	20							1803
0.50-0.99		2957	2549	108	38	8	1				5661
1.00-1.49			2071	20	11	17	2	1			2122
1.50-1.99			850	884	1	2	2	1			1740
2.00-2.49			1	601							602
2.50-2.99				117	24						141
3.00-3.49					39						39
3.50-3.99					10	2					12
4.00-4.49						2					2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	626	3984	5601	1750	123	31	5	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 11344.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	314	896	101	12	1						1324
0.50-0.99		2053	1541	71	33	9					3707
1.00-1.49			1845	13	13	11	2				1884
1.50-1.99			1238	747	1	1	1	2			1990
2.00-2.49				705							705
2.50-2.99				159	64						223
3.00-3.49					72						72
3.50-3.99					13	7					20
4.00-4.49					1	7					8
4.50-4.99						1					1
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	314	2949	4725	1707	198	36	3	2	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 9301.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	217	607	87	8							919
0.50-0.99		1823	967	82	35	4					2911
1.00-1.49			1148	14	23	13	2				1200
1.50-1.99			838	194	5	7		1			1045
2.00-2.49				220		1					221
2.50-2.99				52			1				53
3.00-3.49				1	12						13
3.50-3.99					1						1
4.00-4.49					1						1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	217	2430	3040	571	77	25	3	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 5961.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

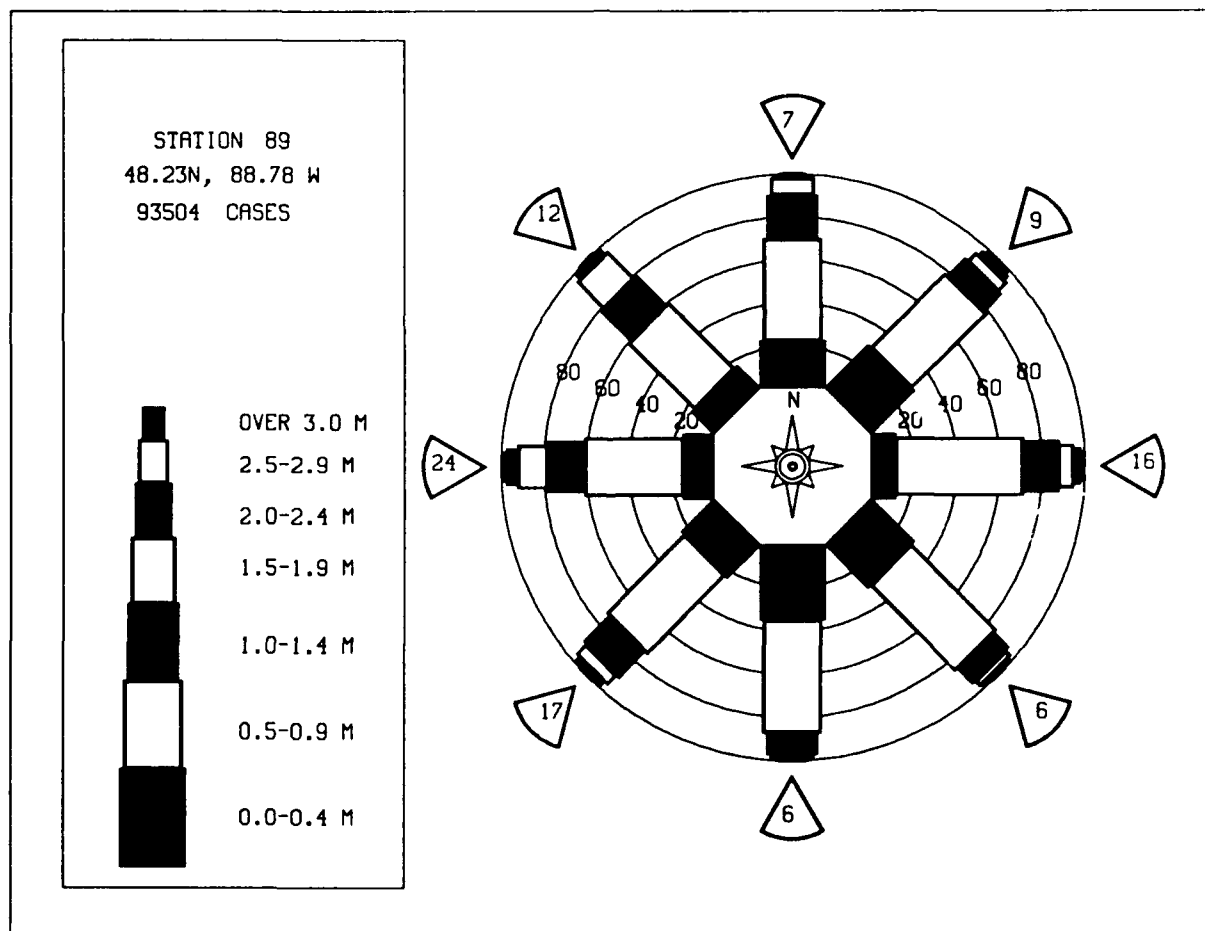
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	128	427	78	12	1						646
0.50-0.99		1208	487	132	35	7					1869
1.00-1.49			845	32	37	14	3	1			932
1.50-1.99			417	36	13	17	1				484
2.00-2.49			14	64		3					81
2.50-2.99				10			1				11
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	128	1635	1841	287	86	41	5	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3773.

STATION S89 48.23N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	460	1257	166	32	6	2	.	.	.	.	1923
0.50-0.99	.	2712	2052	183	62	22	2	.	.	.	5033
1.00-1.49	.	.	1378	160	54	33	4	1	.	.	1630
1.50-1.99	.	.	501	341	49	22	6	4	1	.	924
2.00-2.49	.	.	.	242	41	24	2	2	1	.	316
2.50-2.99	.	.	4	49	17	30	4	.	.	.	100
3.00-3.49	.	.	.	1	17	9	6	2	.	.	35
3.50-3.99	4	2	2	1	.	.	9
4.00-4.49	1	.	1	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	460	3969	4101	1008	250	145	26	11	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S89 (48.23N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0	0	1	1	0	0	0	0	0	0	0	0	0
1957	0	1	1	1	0	0	0	0	0	0	0	0	0
1958	0	1	1	1	0	0	0	0	0	0	0	0	0
1959	0	1	1	1	0	0	0	0	0	0	0	0	0
1960	0	1	1	1	0	0	0	0	0	0	0	0	0
1961	0	1	1	1	0	0	0	0	0	0	0	0	0
1962	0	1	1	1	0	0	0	0	0	0	0	0	0
1963	0	1	1	1	0	0	0	0	0	0	0	0	0
1964	0	1	1	1	0	0	0	0	0	0	0	0	0
1965	0	1	1	1	0	0	0	0	0	0	0	0	0
1966	0	1	1	1	0	0	0	0	0	0	0	0	0
1967	0	1	1	1	0	0	0	0	0	0	0	0	0
1968	0	1	1	1	0	0	0	0	0	0	0	0	0
1969	0	1	1	1	0	0	0	0	0	0	0	0	0
1970	0	1	1	1	0	0	0	0	0	0	0	0	0
1971	0	1	1	1	0	0	0	0	0	0	0	0	0
1972	0	1	1	1	0	0	0	0	0	0	0	0	0
1973	0	1	1	1	0	0	0	0	0	0	0	0	0
1974	0	1	1	1	0	0	0	0	0	0	0	0	0
1975	0	1	1	1	0	0	0	0	0	0	0	0	0
1976	0	1	1	1	0	0	0	0	0	0	0	0	0
1977	0	1	1	1	0	0	0	0	0	0	0	0	0
1978	0	1	1	1	0	0	0	0	0	0	0	0	0
1979	0	1	1	1	0	0	0	0	0	0	0	0	0
1980	0	1	1	1	0	0	0	0	0	0	0	0	0
1981	0	1	1	1	0	0	0	0	0	0	0	0	0
1982	0	1	1	1	0	0	0	0	0	0	0	0	0
1983	0	1	1	1	0	0	0	0	0	0	0	0	0
1984	0	1	1	1	0	0	0	0	0	0	0	0	0
1985	0	1	1	1	0	0	0	0	0	0	0	0	0
1986	0	1	1	1	0	0	0	0	0	0	0	0	0
1987	0	1	1	1	0	0	0	0	0	0	0	0	0
MEAN	1.1	1.0	1.0	0.8	0.8	0.6	0.6	0.6	0.8	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S89 (48.23N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0

32 YR. STATISTICS FOR WIS STATION S89

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.9
MEAN PEAK WAVE PERIOD (SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.1
LARGEST WAVE HS (METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	249.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	77112112

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	303	462	10	6	1	.	.	.	.	.	782
0.50-0.99	.	1249	888	8	13	1	.	.	.	.	2159
1.00-1.49	.	.	855	1	2	2	.	.	.	.	860
1.50-1.99	.	.	286	286	1	.	.	.	.	.	573
2.00-2.49	.	.	.	160	.	.	.	.	.	.	160
2.50-2.99	.	.	.	31	6	.	.	.	.	.	37
3.00-3.49	7	.	.	.	.	.	7
3.50-3.99	2	.	.	.	.	.	2
4.00-4.49	1	.	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	303	1711	2039	492	31	5	0	0	0	0	4291

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 4291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	370	664	25	3	.	.	.	.	.	.	1062
0.50-0.99	.	1096	909	13	8	.	.	.	.	.	2026
1.00-1.49	.	.	879	2	1	.	.	.	.	.	882
1.50-1.99	.	.	165	267	.	.	.	.	.	.	432
2.00-2.49	.	.	.	183	.	.	.	.	.	.	183
2.50-2.99	.	.	.	33	28	.	.	.	.	.	61
3.00-3.49	13	.	.	.	.	.	13
3.50-3.99	1	3	.	.	.	.	4
4.00-4.49	5	.	.	.	.	5
4.50-4.99	2	.	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	370	1760	1978	499	52	11	0	0	0	0	4374

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4374.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	557	876	20	5	.	.	.	.	.	.	1458
0.50-0.99	.	1074	885	9	2	.	.	.	.	.	1970
1.00-1.49	.	.	587	.	2	.	.	.	.	.	589
1.50-1.99	.	.	83	162	.	.	.	.	.	.	245
2.00-2.49	.	.	.	136	.	.	.	.	.	.	136
2.50-2.99	.	.	.	23	23	.	.	.	.	.	46
3.00-3.49	19	.	.	.	.	.	19
3.50-3.99	1	2	.	.	.	.	3
4.00-4.49	2	.	.	.	.	2
4.50-4.99	1	.	.	.	.	1
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	557	1950	1575	335	45	7	0	0	0	0	4186

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 4186.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	660	1751	60	10	2	.	.	.	.	.	2483
0.50-0.99	.	2082	758	57	12	4	.	.	.	.	2913
1.00-1.49	.	.	768	25	8	6	.	.	.	.	807
1.50-1.99	.	.	206	93	1	.	.	.	.	.	300
2.00-2.49	.	.	20	103	4	.	.	.	.	.	127
2.50-2.99	.	.	.	13	33	.	.	.	.	.	46
3.00-3.49	.	.	.	3	10	6	.	.	.	.	19
3.50-3.99	14	.	.	.	.	14
4.00-4.49	1	.	.	.	.	2
4.50-4.99	2	.	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	660	3833	1812	304	69	32	3	0	0	0	6290

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 6290.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	820	2480	88	25		1					3414
0.50-0.99		3838	402	47	23	8	1	1			4320
1.00-1.49			735	12	5	6					758
1.50-1.99			186	4							190
2.00-2.49			12	13							25
2.50-2.99				4							4
3.00-3.49				2							2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	820	6318	1423	107	28	15	1	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 8155.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	337	839	35	8							1219
0.50-0.99		1578	161	2	3						1752
1.00-1.49			263								267
1.50-1.99			73	6							77
2.00-2.49			3								9
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	337	2417	539	26	2	3	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3114.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	242	403	19	4							668
0.50-0.99		1061	191		1						1253
1.00-1.49			157								157
1.50-1.99			55	3							58
2.00-2.49				12							12
2.50-2.99				1							1
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	242	1464	422	20	1	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2014.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	295	734	8	5							1042
0.50-0.99		1021	170			1					1192
1.00-1.49			186								186
1.50-1.99			24	2							26
2.00-2.49				1							1
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	295	1755	388	8	0	1	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 2291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	360	952	20	7	.	1	.	.	.	.	1339
0.50-0.99	.	1198	75	.	.	.	.	.	.	.	1274
1.00-1.49	.	.	228	.	.	.	.	.	.	.	228
1.50-1.99	.	.	21	.	.	.	.	.	.	.	21
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	360	2150	344	8	0	1	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2682.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	378	881	16	5	.	.	.	.	.	.	1280
0.50-0.99	.	1382	191	5	2	.	.	.	.	.	1580
1.00-1.49	.	.	317	.	.	.	.	.	.	.	317
1.50-1.99	.	.	65	5	.	.	.	.	.	.	70
2.00-2.49	.	.	2	3	.	.	.	.	.	.	5
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	378	2263	591	18	2	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3045.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	567	1538	29	4	1	.	.	.	.	.	2139
0.50-0.99	.	2656	851	53	1	.	.	.	.	.	3561
1.00-1.49	.	.	407	144	33	7	.	.	.	.	591
1.50-1.99	.	.	144	74	39	12	2	.	.	.	271
2.00-2.49	.	.	5	25	25	34	2	.	.	.	91
2.50-2.99	.	.	.	4	.	2	.	.	.	.	6
3.00-3.49	.	.	.	1	.	2	.	.	.	.	4
3.50-3.99	1	.	.	.	.	1
4.00-4.49	1	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	567	4194	1436	305	99	57	6	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 6242.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	953	2298	36	8	.	.	.	.	.	.	3295
0.50-0.99	.	5083	2867	34	1	.	.	.	.	.	7985
1.00-1.49	.	.	1441	288	33	4	.	.	.	.	1766
1.50-1.99	.	.	332	317	47	12	2	.	.	.	710
2.00-2.49	.	.	3	145	52	37	16	1	.	.	254
2.50-2.99	.	.	.	18	13	23	9	.	1	.	73
3.00-3.49	3	6	5	.	2	.	20
3.50-3.99	1	.	.	4	3	.	5
4.00-4.49	1	.	.	1
4.50-4.99	0
5.00-5.49	1	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	953	7381	4679	810	150	82	32	16	7	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 13206.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	972	1183	20	6							2181
0.50-0.99		3769	2837	5	2						6613
1.00-1.49			2294	12							2306
1.50-1.99			837	814	2						1653
2.00-2.49			1	548							549
2.50-2.99				105	23						125
3.00-3.49					32	1					33
3.50-3.99					10			2			13
4.00-4.49						2					2
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	972	4952	5989	1490	66	4	0	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 12608.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	526	1117	9	2	1						1655
0.50-0.99		2488	1597	5	3						4093
1.00-1.49			1852								1852
1.50-1.99			1056	695							1751
2.00-2.49				659							659
2.50-2.99				148	23						171
3.00-3.49					37						37
3.50-3.99					10	1					11
4.00-4.49					1	3					4
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	526	3605	4514	1509	75	4	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 9576.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	325	694	12	5							1040
0.50-0.99		2221	901	6	4						3132
1.00-1.49			1752								1752
1.50-1.99			1234	245							1479
2.00-2.49			1	312							313
2.50-2.99				59							59
3.00-3.49				1	11						12
3.50-3.99					2						2
4.00-4.49					1						1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	329	2915	3900	628	18	0	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 7291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

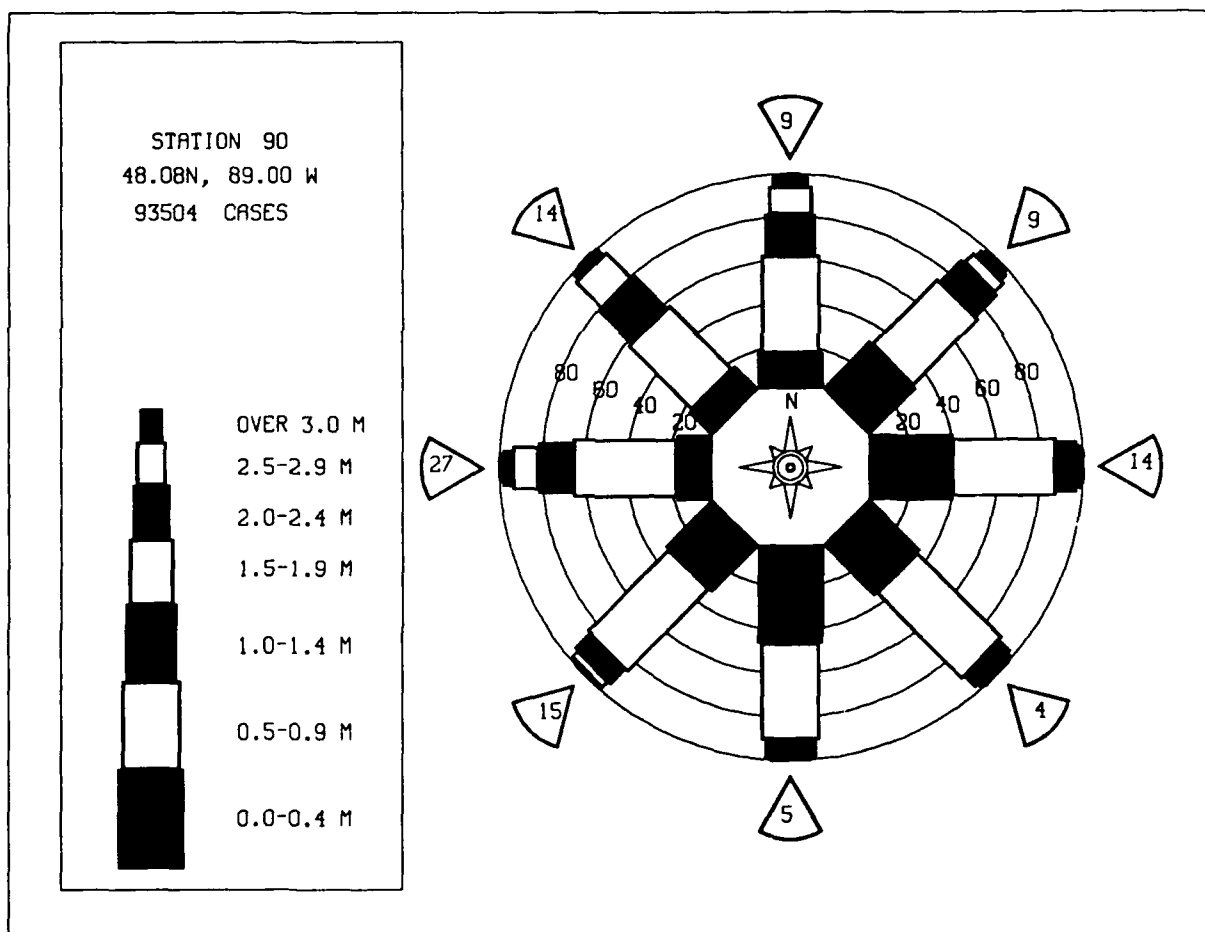
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	203	318	9	2	1						533
0.50-0.99		1132	713	4	3						1852
1.00-1.49			1013		1						1014
1.50-1.99			453	279							732
2.00-2.49				225							225
2.50-2.99				45	4						49
3.00-3.49					10						10
3.50-3.99					3						3
4.00-4.49						1					1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	203	1450	2188	555	22	1	0	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4139.

STATION S90 48.08N 89.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	787	1719	42	11							2559
0.50-0.99		3293	1440	25	8	1					4767
1.00-1.49			1374	48		2					1432
1.50-1.99			522	325	8	2					857
2.00-2.49			4	254	15	2	1				274
2.50-2.99				48	14	2					65
3.00-3.49					3	1					15
3.50-3.99											1
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	787	5012	3382	711	64	18	1	0	0	0	93504

MEAN HS(M)= 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S90 (48.08N 89.00W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.9	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1957	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1958	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1959	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1960	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1961	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1962	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1963	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1964	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1965	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1966	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1967	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1968	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1969	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1970	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1971	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1972	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1973	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1974	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1975	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1976	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1977	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1978	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1979	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1980	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1981	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1982	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1983	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1984	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1985	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1986	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
1987	1.0	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.9	1.1	1.0	0.8
MEAN	1.0	1.0	0.9	0.8	0.7	0.6	0.5	0.6	0.7	0.8	1.0	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S90 (48.08N 89.00W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.5	2.6	3.0	2.4	2.6	1.8	1.6	1.6	2.2	3.0	3.1	3.4	2.4
1957	2.7	2.8	2.8	2.7	2.5	2.4	2.1	2.0	2.1	2.0	4.3	2.9	2.9
1958	2.7	2.8	2.8	2.7	2.6	2.2	2.1	2.2	2.2	2.8	3.3	3.1	3.1
1959	2.3	2.8	2.9	2.7	2.6	2.0	2.3	2.1	2.3	2.5	3.4	3.7	3.7
1960	2.7	2.8	2.8	2.7	2.4	2.1	1.6	2.2	2.1	2.9	2.6	2.7	2.7
1961	2.6	2.5	2.9	2.6	2.1	1.6	1.6	1.8	2.6	2.8	3.2	3.6	3.6
1962	4.0	2.2	2.9	2.2	2.0	1.7	2.1	1.8	2.3	3.4	3.0	3.7	3.7
1963	2.3	3.2	3.2	2.6	2.9	1.8	2.1	1.9	1.9	2.4	3.1	3.2	3.2
1964	2.7	2.8	2.5	2.2	3.0	2.0	1.2	2.1	2.3	3.3	2.7	2.2	2.2
1965	3.3	2.9	2.4	2.2	2.5	2.1	1.4	1.6	2.6	2.7	4.0	3.3	3.3
1966	4.2	3.6	4.6	3.5	3.4	2.5	2.1	2.2	2.7	4.0	3.8	3.5	3.5
1967	4.7	3.7	3.1	3.3	2.6	2.3	3.4	2.1	3.4	3.3	3.0	3.6	3.6
1968	3.1	4.1	4.2	3.8	2.4	2.3	2.7	2.9	2.8	2.9	3.7	4.8	4.8
1969	3.2	2.7	2.5	2.2	2.0	1.8	1.3	1.9	1.7	2.2	2.1	2.7	2.7
1970	2.4	2.4	2.7	2.9	2.3	1.7	1.9	1.7	2.3	2.8	3.0	2.7	2.7
1971	2.3	2.7	3.4	2.1	2.1	1.6	1.6	1.6	1.9	3.6	2.7	2.2	2.2
1972	2.6	2.2	2.4	2.0	1.4	2.0	1.8	1.8	2.5	2.8	2.4	3.7	3.7
1973	2.2	2.2	2.4	2.2	1.4	1.4	2.0	1.0	2.4	2.6	2.3	2.6	2.6
1974	3.1	2.1	2.6	2.0	1.8	1.7	2.1	2.1	1.6	2.1	2.4	2.5	2.5
1975	3.4	2.5	3.4	1.4	2.4	1.9	1.9	2.1	2.1	2.9	2.5	2.7	2.7
1976	2.6	2.7	3.1	2.2	1.9	1.6	1.5	1.7	2.6	2.4	2.4	3.4	3.4
1977	3.1	3.2	3.6	2.0	2.4	1.4	1.9	1.8	3.4	2.2	5.1	3.6	3.6
1978	2.6	2.0	2.5	2.0	1.9	1.7	1.3	2.1	2.2	2.5	2.7	2.4	2.4
1979	2.0	2.3	2.4	1.8	1.6	2.3	1.7	1.8	1.8	2.1	2.8	2.0	2.0
1980	2.9	2.0	2.2	1.9	1.6	1.4	1.3	2.1	2.8	2.8	2.2	2.6	2.6
1981	2.1	2.1	2.2	2.5	1.7	2.4	1.2	1.1	3.7	2.4	2.1	2.0	2.0
1982	4.0	2.1	3.8	2.6	1.7	2.2	2.2	1.7	1.8	2.5	4.2	2.6	2.6
1983	2.7	2.6	2.4	2.3	1.9	1.9	1.8	1.7	2.3	2.4	4.2	3.5	3.5
1984	3.2	3.2	3.9	3.0	2.7	2.1	1.7	1.6	2.3	2.6	3.0	2.7	2.7
1985	3.5	2.4	3.9	2.5	1.9	2.5	1.6	1.9	2.9	2.7	2.8	2.7	2.7
1986	2.6	2.6	2.5	2.1	2.3	1.7	2.0	1.5	2.2	3.1	3.4	2.4	2.4
1987	1.8	2.6	2.2	1.6	1.4	1.1	0.9	1.4	1.2	2.0	2.0	2.1	2.1

32 YR. STATISTICS FOR WIS STATION S90

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	0.8
MEAN PEAK WAVE PERIOD (SECONDS)	3.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.5
STANDARD DEVIATION OF WAVE TP (SECONDS)	0.9
LARGEST WAVE HS (METERS)	5.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	256.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	77112112

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	377	872	18	20	3						1290
0.50-0.99		1592	380	11	22	6					2011
1.00-1.49			745	36	3	4					788
1.50-1.99			208	12	1						221
2.00-2.49			11	16	1						28
2.50-2.99				5							5
3.00-3.49				1							1
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	377	2464	1362	101	30	10	0	0	0	0	4070

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4070.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	437	945	22	5	1						1410
0.50-0.99		1158	511	11	11	2					1693
1.00-1.49			663	4	2	1					670
1.50-1.99			91	209							300
2.00-2.49			1	129							130
2.50-2.99				26	29						55
3.00-3.49					10						10
3.50-3.99						4					4
4.00-4.49						4					4
4.50-4.99						2					2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	437	2103	1288	384	53	13	0	0	0	0	4009

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4009.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	608	1013	12	4							1637
0.50-0.99		1181	890		3						2074
1.00-1.49			589	1							590
1.50-1.99			85	183							268
2.00-2.49				135							135
2.50-2.99				18	24						42
3.00-3.49					13	1					14
3.50-3.99					1	4					5
4.00-4.49						1	1				2
4.50-4.99						2					2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	608	2194	1576	341	41	8	1	0	0	0	4468

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4468.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	489	858	10	8							1365
0.50-0.99		1968	1614	1	2	1					3586
1.00-1.49			1069	14							1083
1.50-1.99			256	301							557
2.00-2.49				203	10						213
2.50-2.99				31	57						88
3.00-3.49					28	9					37
3.50-3.99					4	12					16
4.00-4.49						11	3				14
4.50-4.99							2				2
5.00-5.49							2				2
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	489	2826	2949	558	101	33	7	0	0	0	6523

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 6523.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	528	813	8	2	1	1	1	.	.	.	1353
0.50-0.99	.	3173	2638	3	3	1	1	.	.	.	5819
1.00-1.49	.	.	1443	4	.	.	.	.	.	.	1447
1.50-1.99	.	.	283	249	.	.	.	.	.	.	532
2.00-2.49	.	.	.	134	4	.	.	.	.	.	134
2.50-2.99	.	.	.	28	7	.	.	.	.	.	32
3.00-3.49	3	.	.	.	.	.	3
3.50-3.99	2	.	.	.	.	2
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	528	3986	4372	420	18	4	1	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 8730.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	260	360	11	2	.	2	.	.	.	.	633
0.50-0.99	.	1409	757	1	.	.	.	.	.	.	2168
1.00-1.49	.	.	443	1	.	.	.	.	.	.	444
1.50-1.99	.	.	102	90	.	.	.	.	.	.	192
2.00-2.49	.	.	.	48	.	.	.	.	.	.	48
2.50-2.99	.	.	.	7	2	.	.	.	.	.	9
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	260	1769	1313	148	2	2	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 3273.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	235	427	7	3	.	.	.	.	.	.	672
0.50-0.99	.	1141	267	1	.	.	.	.	.	.	1409
1.00-1.49	.	.	191	.	.	.	.	.	.	.	191
1.50-1.99	.	.	69	3	.	.	.	.	.	.	72
2.00-2.49	.	.	.	12	.	.	.	.	.	.	12
2.50-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	235	1568	534	19	1	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2208.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	309	865	6	4	.	.	.	.	.	.	1184
0.50-0.99	.	1168	179	.	.	1	.	.	.	.	1348
1.00-1.49	.	.	209	.	.	.	.	.	.	.	209
1.50-1.99	.	.	20	1	.	.	.	.	.	.	21
2.00-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	309	2033	414	6	0	1	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 2587.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	343	1043	10	3	.	.	.	.	.	.	1399
0.50-0.99	.	1394	131	5	.	.	.	.	.	.	1530
1.00-1.49	.	.	293	.	.	.	.	.	.	.	293
1.50-1.99	.	.	29	.	.	.	.	.	.	.	29
2.00-2.49	.	.	1	1	.	.	.	.	.	.	2
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	343	2437	464	9	0	0	0	0	0	0	3046

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3046.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	371	814	12	4	.	.	.	.	.	.	1201
0.50-0.99	.	1209	855	9	.	.	.	.	.	.	2073
1.00-1.49	.	.	555	95	3	.	.	.	.	.	653
1.50-1.99	.	.	87	110	11	.	.	.	.	.	208
2.00-2.49	.	.	.	40	19	1	.	.	.	.	60
2.50-2.99	16	6	.	.	.	.	22
3.00-3.49	1	14	1	.	.	.	16
3.50-3.99	2	.	.	.	.	2
4.00-4.49	2	.	.	.	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	371	2023	1509	258	50	23	3	0	0	0	3970

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 3970.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	686	1542	21	5	1	.	.	.	.	.	2255
0.50-0.99	.	1993	2331	6	1	.	.	.	.	.	4331
1.00-1.49	.	.	960	268	6	1	.	.	.	.	1235
1.50-1.99	.	.	77	282	64	3	2	.	.	.	428
2.00-2.49	.	.	.	99	69	9	.	.	.	.	177
2.50-2.99	.	.	.	4	74	33	1	.	.	.	112
3.00-3.49	2	54	6	.	.	.	62
3.50-3.99	11	20	1	.	.	32
4.00-4.49	8	4	.	.	12
4.50-4.99	2	5	.	.	7
5.00-5.49	1	.	.	3
5.50-5.99	2	.	1
6.00-6.49	1	.	0
6.50-6.99	0
7.00+	0
TOTAL	686	3535	3389	664	217	111	39	11	3	0	8104

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 8104.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	1254	3218	68	11	.	.	.	.	.	.	4551
0.50-0.99	.	4065	1264	22	2	.	.	.	.	.	5353
1.00-1.49	.	.	1022	122	2	.	.	.	.	.	1146
1.50-1.99	.	.	209	88	24	5	.	.	.	.	326
2.00-2.49	.	.	11	47	17	7	1	.	.	.	83
2.50-2.99	.	.	.	9	12	4	.	.	.	.	25
3.00-3.49	3	4	.	.	.	.	7
3.50-3.99	6	.	.	.	.	8
4.00-4.49	3	.	.	.	4
4.50-4.99	1	.	.	2
5.00-5.49	1	.	.	1
5.50-5.99	1	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1254	7283	2574	299	60	26	6	4	1	0	10770

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 10770.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	1424	3132	23	16							4595
0.50-0.99		4339	443	6	3						4791
1.00-1.49			2123	3							2126
1.50-1.99			598								598
2.00-2.49			24	72							96
2.50-2.99				18							18
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	1424	7471	3211	115	3	0	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 11437.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	665	1764	18	5							2452
0.50-0.99		3042	660	3	2						3707
1.00-1.49			1931	1							1932
1.50-1.99			970	54							1024
2.00-2.49			34	167							201
2.50-2.99				38							38
3.00-3.49				6	3						9
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	665	4806	3613	274	5	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 8761.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	401	788	28	5							1222
0.50-0.99		2257	1178	4							3444
1.00-1.49			1265	3							1268
1.50-1.99			1183	258							1441
2.00-2.49				281							281
2.50-2.99				58							58
3.00-3.49				2	12						14
3.50-3.99					3						3
4.00-4.49					1						1
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	401	3045	3654	612	20	0	0	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 7237.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

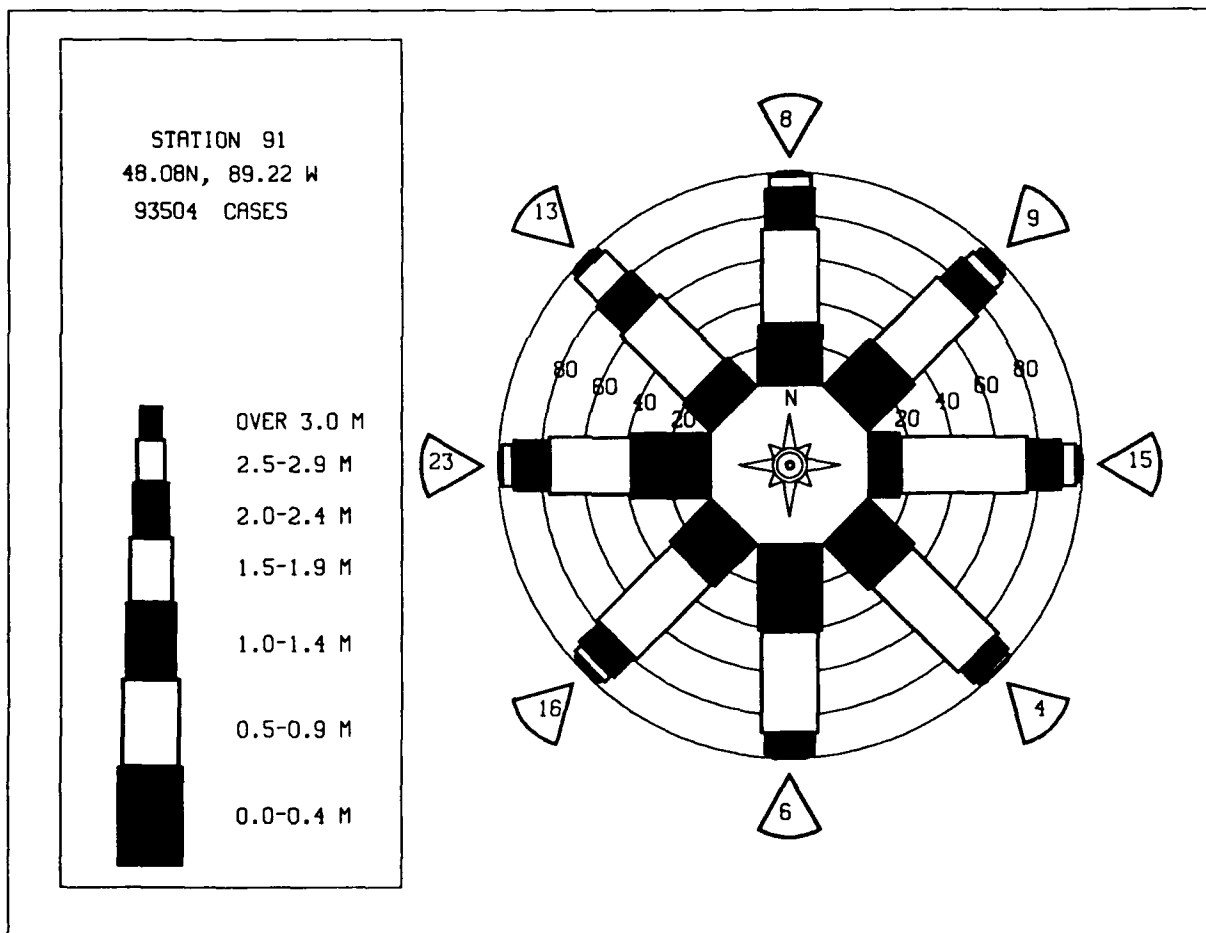
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	243	647	16	12	1	1					920
0.50-0.99		1513	510	7	9						2039
1.00-1.49			973	2		1					976
1.50-1.99			505	67							572
2.00-2.49			10	69							79
2.50-2.99				18							18
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	243	2160	2014	175	10	2	0	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4311.

STATION S91 48.08N 89.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	863	1910	29	11	6	1	.	.	.	.	2813
0.50-0.99	.	3261	1461	9	1	.	.	.	.	.	4738
1.00-1.49	.	.	1448	55	1	.	.	.	.	.	1504
1.50-1.99	.	.	478	191	10	.	.	.	.	.	679
2.00-2.49	.	.	9	146	11	1	.	.	.	.	167
2.50-2.99	.	.	.	26	22	4	.	.	.	.	52
3.00-3.49	8	8	.	.	.	.	16
3.50-3.99	1	4	.	.	.	.	7
4.00-4.49	1	2	.	.	.	2
4.50-4.99	1	.	.	.	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	863	5171	3425	438	59	19	3	0	0	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S91 (48.08N 89.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.9	1.0	1.0	0.8	0.8	0.6	0.6	0.5	0.6	0.9	1.0	0.9	0.8
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	0.9	0.9	0.7	0.7	0.6	0.5	0.5	0.7	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S91 (48.08N 89.22W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.5	2.9	4.4	2.4	2.6	1.4	1.4	1.5	2.0	2.9	3.1	2.7	
1957	2.8	2.4	2.4	2.1	2.2	2.1	1.8	2.7	2.1	2.0	3.2	2.9	
1958	2.8	2.9	1.9	2.5	3.9	3.4	1.5	3.0	3.1	2.7	4.8	2.3	
1959	2.3	4.2	2.8	2.2	3.9	1.6	2.9	1.8	3.2	2.5	2.5	3.9	
1960	2.6	2.6	2.9	2.3	2.4	1.5	1.6	1.9	2.1	3.0	3.1	3.5	
1961	2.1	2.1	2.5	2.7	2.1	1.6	1.6	1.8	2.6	2.5	3.9	2.9	
1962	3.0	2.4	2.9	1.8	2.4	1.6	1.6	1.6	2.1	3.3	3.3	2.7	
1963	2.3	3.2	3.3	2.6	2.1	1.5	1.8	2.5	2.1	3.1	3.3	3.3	
1964	2.8	4.1	3.2	2.2	3.3	1.8	1.1	1.7	2.7	2.1	2.7	2.0	
1965	4.3	3.6	2.4	2.1	1.9	1.5	1.4	1.4	2.2	3.6	4.3	3.9	
1966	3.2	4.3	4.7	2.9	2.7	2.5	2.3	2.2	2.5	4.2	4.4	3.1	
1967	5.3	3.1	4.0	2.8	2.9	2.4	2.5	2.1	3.4	2.8	3.9	4.3	
1968	3.4	4.1	4.4	3.8	2.2	2.2	2.8	2.9	3.1	3.1	4.0	5.3	
1969	3.8	2.1	2.6	2.2	2.2	2.1	1.2	2.2	2.2	2.6	2.4	2.6	
1970	2.1	2.2	3.1	2.2	1.8	2.2	1.7	1.4	2.5	3.9	3.0	3.1	
1971	2.5	3.0	3.4	2.0	2.3	1.5	1.8	1.5	2.1	5.6	3.5	2.1	
1972	3.0	2.8	2.5	2.3	1.3	2.0	1.4	2.1	3.4	3.0	2.2	4.2	
1973	2.1	2.3	2.4	2.4	2.1	1.4	1.4	1.2	2.3	3.6	2.7	2.8	
1974	2.5	1.9	2.7	2.2	3.0	1.6	1.6	1.9	1.7	2.8	2.5	2.9	
1975	4.3	2.9	3.5	1.8	3.0	1.4	1.8	2.5	3.0	3.7	2.8	2.2	
1976	3.0	2.7	3.1	1.9	1.4	1.6	1.8	1.6	1.9	3.5	2.2	2.5	
1977	2.5	3.2	3.8	1.8	2.5	1.4	1.9	1.4	5.1	2.8	5.2	4.2	
1978	1.9	1.8	2.4	1.9	1.8	2.1	1.4	1.6	2.5	2.2	3.0	2.1	
1979	1.9	2.6	2.2	1.9	2.3	1.6	1.6	2.1	1.8	4.3	4.3	3.0	
1980	2.3	1.9	2.3	1.9	1.5	1.3	1.5	3.1	4.1	2.3	2.2	3.5	
1981	2.2	2.2	2.7	2.6	1.8	2.8	1.5	1.4	4.5	2.4	2.6	1.8	
1982	4.0	1.7	3.7	2.6	1.5	1.8	1.6	1.3	2.4	3.8	4.3	3.8	
1983	2.2	4.3	2.9	2.7	1.9	1.9	1.4	1.7	2.0	2.2	5.5	3.2	
1984	4.2	3.4	3.2	4.5	2.0	1.9	1.5	1.9	3.0	3.3	3.3	2.6	
1985	3.7	2.2	4.6	2.5	1.7	2.0	1.5	1.9	3.0	2.5	3.2	2.6	
1986	3.6	2.9	2.5	2.0	2.8	1.5	1.5	1.9	2.2	2.6	5.2	2.0	
1987	1.8	2.3	2.3	1.5	1.8	0.7	1.2	1.0	1.2	1.8	2.4	1.9	

32 YR. STATISTICS FOR WIS STATION S91

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.9
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	233.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		71103115

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	274	627	149	23	1						1074
0.50-0.99		288	991	80	31	7					1397
1.00-1.49			468	141	27	27					663
1.50-1.99			36	359	11	20					431
2.00-2.49				168	47	7	2				237
2.50-2.99				3	124	1		3			130
3.00-3.49					26	17					46
3.50-3.99						8					8
4.00-4.49						2					4
4.50-4.99							1		2		1
5.00-5.49											0
5.50-5.99										1	1
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	274	915	1644	774	267	89	8	8	2	1	3736

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 3736.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	259	524	146	12	2	1					944
0.50-0.99		287	840	104	2	1					1255
1.00-1.49			300	148	35	19					503
1.50-1.99			14	190	26	34					268
2.00-2.49				80	34	21					143
2.50-2.99				3	42	21		2			69
3.00-3.49					18	22		10	1		60
3.50-3.99					1	6		3	1		18
4.00-4.49						3		5	2		13
4.50-4.99								1	4		6
5.00-5.49									1	2	4
5.50-5.99										1	3
6.00-6.49											1
6.50-6.99											0
7.00+											0
TOTAL	259	811	1300	537	182	131	31	22	9	5	3090

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 3090.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	382	760	188	16							1346
0.50-0.99		333	976	112	21	4					1446
1.00-1.49			341	186	26	7					560
1.50-1.99			13	185	43	12					254
2.00-2.49				59	47	29					137
2.50-2.99				3	25	22					58
3.00-3.49					2	28		10			48
3.50-3.99						6		9			24
4.00-4.49								5	3		19
4.50-4.99								1	1		3
5.00-5.49										1	3
5.50-5.99											1
6.00-6.49										1	1
6.50-6.99											0
7.00+											0
TOTAL	382	1093	1518	561	164	108	34	31	7	2	3663

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 3663.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	334	874	140	17	1						1366
0.50-0.99		416	1208	106	12						1743
1.00-1.49			348	301	32	6					688
1.50-1.99			11	177	64	17					289
2.00-2.49				67	47	32					151
2.50-2.99					68	17					85
3.00-3.49					8	11		2			22
3.50-3.99						37		4			89
4.00-4.49						12		6			20
4.50-4.99								9			20
5.00-5.49											14
5.50-5.99								3		1	6
6.00-6.49										1	4
6.50-6.99											6
7.00+											0
TOTAL	334	1290	1707	668	233	193	42	31	18	6	4245

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 4245.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	579	1494	188	14							2275
0.50-0.99		960	2743	81	9	2					3795
1.00-1.49			825	760	38	6					1629
1.50-1.99			21	416	128	25	1				591
2.00-2.49				96	93	33	7				229
2.50-2.99					131	36		2			169
3.00-3.49					9	114		2	1		126
3.50-3.99						90	5				95
4.00-4.49						25	14	1			40
4.50-4.99						1	23	1			27
5.00-5.49							3	2			5
5.50-5.99								4			4
6.00-6.49								3	1		4
6.50-6.99											0
7.00+											0
TOTAL	579	2454	3777	1367	408	332	55	15	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 8419.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	451	1053	115	12							1631
0.50-0.99		595	1548	45	4	1					2193
1.00-1.49			403	275	16	3	1	1			699
1.50-1.99			13	198	42	2	1	1			257
2.00-2.49				53	25	8					86
2.50-2.99					41	6		1			48
3.00-3.49					2	32	1	1			36
3.50-3.99						10					10
4.00-4.49						2	4				6
4.50-4.99							3				3
5.00-5.49											0
5.50-5.99								2			2
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	451	1648	2079	583	130	64	10	6	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4661.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	560	1011	162	18	1						1752
0.50-0.99		399	888	18	2	2					1309
1.00-1.49			225	83	2						310
1.50-1.99			7	109	1	2					119
2.00-2.49				41	13						54
2.50-2.99					7	1					8
3.00-3.49					3	1					4
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	560	1410	1282	269	29	6	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 3333.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	480	1107	108	13							1708
0.50-0.99		439	873	14	4	3					1333
1.00-1.49			180	64	1	1					246
1.50-1.99			6	85	1		1				93
2.00-2.49				28	6						34
2.50-2.99				1	17						18
3.00-3.49					2						2
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	480	1546	1167	205	31	4	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3219.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	553	1115	131	13	2	.	.	.	.	.	1814
0.50-0.99	.	402	834	17	9	1	.	.	.	.	1263
1.00-1.49	.	.	267	52	4	1	.	.	.	.	324
1.50-1.99	.	.	11	122	6	1	.	.	.	.	134
2.00-2.49	.	.	.	45	8	.	.	.	.	.	51
2.50-2.99	.	.	.	2	2	.	.	.	.	.	10
3.00-3.49	1	.	.	.	.	2
3.50-3.99	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	553	1517	1243	251	31	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3374.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	469	1120	159	19	1	.	.	.	.	.	1768
0.50-0.99	.	441	1070	28	6	1	.	.	.	.	1546
1.00-1.49	.	.	352	113	4	.	.	.	.	.	469
1.50-1.99	.	.	21	165	9	.	.	.	.	.	195
2.00-2.49	.	.	.	69	24	1	.	.	.	.	94
2.50-2.99	36	.	.	.	.	.	36
3.00-3.49	1	5	.	.	.	.	6
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	469	1561	1602	394	81	7	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3856.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	618	1658	320	35	4	.	.	1	.	.	2635
0.50-0.99	.	592	1986	146	12	4	.	.	.	.	2741
1.00-1.49	.	.	416	350	12	4	.	.	.	.	782
1.50-1.99	.	.	35	265	29	.	.	.	.	.	329
2.00-2.49	.	.	.	91	73	2	.	.	.	.	166
2.50-2.99	.	.	.	1	105	1	.	.	.	.	107
3.00-3.49	2	22	.	.	.	.	24
3.50-3.99	11	.	.	.	.	11
4.00-4.49	5	.	.	.	.	5
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	618	2250	2757	888	237	49	0	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 6370.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	794	2230	370	48	1	.	.	.	.	.	3443
0.50-0.99	.	1021	2916	162	24	6	.	.	.	.	4129
1.00-1.49	.	2	705	740	20	1	.	.	.	.	1468
1.50-1.99	.	.	47	479	104	.	.	.	.	.	630
2.00-2.49	.	.	.	156	148	12	.	.	.	.	316
2.50-2.99	.	.	.	1	154	28	.	.	.	.	183
3.00-3.49	13	102	1	.	.	.	116
3.50-3.99	40	1	.	.	.	41
4.00-4.49	8	11	4	.	.	23
4.50-4.99	3	6	.	.	9
5.00-5.49	5	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	794	3253	4038	1586	464	197	16	15	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 9703.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	1149	2799	409	64	12	.	.	.	.	.	4433
0.50-0.99	.	1194	3282	94	26	14	.	.	.	.	4610
1.00-1.49	.	1	890	945	5	3	.	.	.	.	1844
1.50-1.99	.	.	83	890	157	1	.	.	.	.	1131
2.00-2.49	.	.	.	328	254	24	.	.	.	.	606
2.50-2.99	.	.	.	4	419	82	.	.	.	.	505
3.00-3.49	17	309	.	.	.	.	326
3.50-3.99	125	.	.	.	.	126
4.00-4.49	32	31	.	.	.	63
4.50-4.99	13	2	.	.	15
5.00-5.49	1	.	.	1
5.50-5.99	2	.	.	2
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	1149	3994	4664	2325	890	590	45	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 12787.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	783	2107	281	45	6	.	.	.	.	.	3222
0.50-0.99	.	878	2864	56	34	9	.	.	.	.	3841
1.00-1.49	.	1	1065	709	8	9	.	.	.	.	1793
1.50-1.99	.	.	67	1161	52	1	.	.	.	.	1280
2.00-2.49	.	.	.	493	274	2	.	.	.	.	769
2.50-2.99	.	.	.	2	595	18	.	.	.	.	615
3.00-3.49	72	193	.	.	.	.	265
3.50-3.99	87	.	.	.	.	87
4.00-4.49	24	11	.	.	.	35
4.50-4.99	8	.	.	.	8
5.00-5.49	4	.	.	.	4
5.50-5.99	2	.	.	2
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	783	2986	4277	2466	1041	342	24	3	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 11161.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	368	1061	207	38	5	1	.	.	.	.	1680
0.50-0.99	.	536	2167	74	32	11	.	.	.	.	2820
1.00-1.49	.	.	977	392	11	8	1	.	.	.	1389
1.50-1.99	.	.	48	932	2	1	.	.	.	.	983
2.00-2.49	.	.	.	462	196	.	.	.	.	.	658
2.50-2.99	.	.	.	1	425	.	.	.	.	.	426
3.00-3.49	73	36	.	.	.	.	109
3.50-3.99	26	.	.	.	.	26
4.00-4.49	6	.	.	.	.	6
4.50-4.99	2	.	.	.	2
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	368	1597	3399	1899	744	89	4	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 7587.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

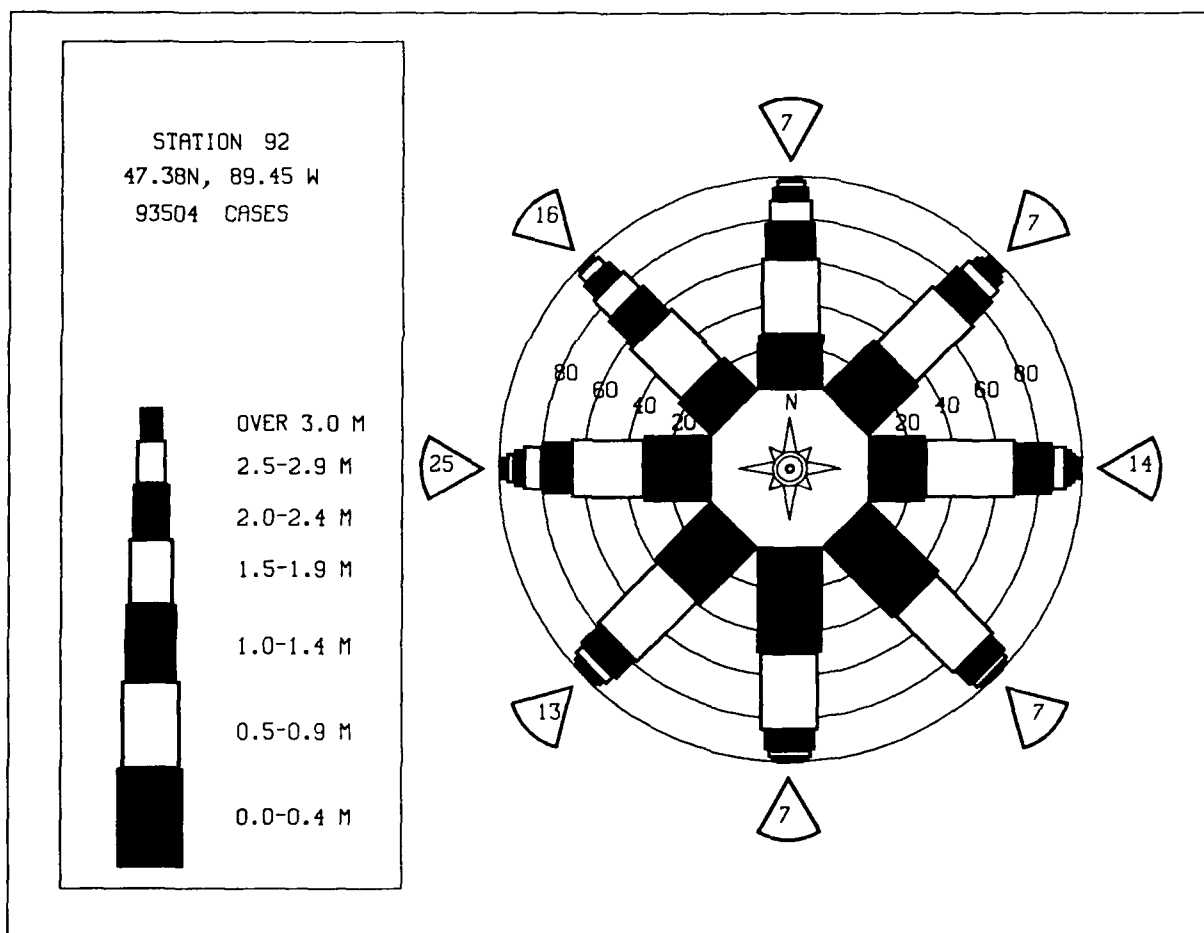
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	209	559	131	21	2	1	.	.	.	.	922
0.50-0.99	.	336	1193	58	32	11	.	.	.	.	1630
1.00-1.49	.	.	642	160	13	18	1	.	.	.	834
1.50-1.99	.	.	27	491	.	5	3	.	.	.	526
2.00-2.49	.	.	.	270	91	1	.	.	.	.	362
2.50-2.99	.	.	.	1	228	.	.	.	.	.	229
3.00-3.49	48	17	.	.	.	.	65
3.50-3.99	16	.	.	.	.	16
4.00-4.49	2	.	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	209	895	1993	1001	414	69	5	0	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4300.

STATION S92 47.38N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	827	2010	321	41	4	8	.	.	.	.	3203
0.50-0.99	.	912	2638	120	28	11	.	.	.	.	3706
1.00-1.49	.	.	841	542	26	12	1	.	.	.	1420
1.50-1.99	.	.	46	623	67	12	1	.	.	.	749
2.00-2.49	.	.	.	251	138	17	2	.	.	.	408
2.50-2.99	.	.	.	2	243	23	1	.	.	.	269
3.00-3.49	30	97	2	3	.	.	132
3.50-3.99	47	2	1	.	.	56
4.00-4.49	12	9	2	.	.	23
4.50-4.99	6	1	1	.	8
5.00-5.49	1	1	.	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	827	2922	3846	1579	536	227	24	9	1	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S92 (47.38N 89.45W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.1	1.2	1.1	0.8	0.6	0.6	0.5	0.7	1.2	1.4	1.2	0.9
1957	0.3	1.2	0.9	0.9	0.9	0.6	0.5	0.5	0.7	0.9	1.3	1.2	0.9
1958	0.8	1.2	0.9	0.9	0.9	0.6	0.5	0.5	0.8	0.9	1.4	1.2	0.9
1959	0.0	1.1	0.9	0.9	0.9	0.5	0.5	0.5	0.8	0.9	1.3	1.2	0.9
1960	1.1	1.1	0.9	0.9	0.8	0.5	0.5	0.5	0.7	0.9	1.3	1.2	0.9
1961	0.0	1.1	0.9	0.9	0.7	0.4	0.4	0.4	0.7	0.8	1.1	1.0	0.9
1962	0.9	1.1	0.9	0.8	0.7	0.4	0.4	0.4	0.6	0.8	1.1	1.2	0.9
1963	1.2	1.2	1.0	0.7	0.6	0.5	0.5	0.5	0.6	0.7	1.1	1.1	0.8
1964	1.2	1.1	1.1	1.0	0.8	0.5	0.5	0.7	0.8	0.9	1.1	1.1	0.9
1965	1.4	1.4	1.4	1.1	0.8	0.7	0.4	0.4	0.7	1.1	1.1	1.1	1.0
1966	1.6	1.5	2.0	1.3	1.2	0.8	0.7	0.7	1.0	1.5	1.5	1.1	1.3
1967	1.6	1.4	1.1	1.2	1.1	0.8	0.7	0.7	0.9	1.6	1.4	1.1	1.1
1968	1.3	2.0	1.6	1.3	0.9	0.8	0.8	0.8	0.9	1.2	1.7	1.1	1.3
1969	1.5	0.9	1.1	1.0	0.7	0.6	0.5	0.7	0.7	1.0	1.1	1.0	0.7
1970	1.0	1.2	1.0	1.1	0.9	0.6	0.6	0.5	0.8	0.9	1.1	1.0	0.9
1971	1.3	1.3	1.1	1.0	0.8	0.5	0.6	0.5	0.6	1.0	1.1	1.0	0.9
1972	1.4	1.1	1.1	1.0	0.8	0.5	0.4	0.4	0.8	1.1	1.1	1.1	0.8
1973	1.1	1.1	1.1	1.0	0.9	0.5	0.5	0.4	0.8	0.9	1.2	1.0	0.8
1974	1.0	0.7	1.0	0.8	0.7	0.6	0.5	0.6	0.7	0.8	1.1	1.0	0.8
1975	1.2	1.0	1.3	0.7	0.4	0.5	0.5	0.6	0.7	1.0	1.2	0.9	0.8
1976	1.2	1.2	1.3	0.4	0.7	0.6	0.4	0.5	0.6	0.6	1.1	1.0	0.8
1977	1.3	1.4	1.5	0.6	0.6	0.4	0.5	0.5	0.7	0.8	1.1	1.1	0.9
1978	1.1	0.8	0.8	0.9	0.5	0.5	0.4	0.5	0.9	0.8	1.1	1.1	0.8
1979	1.0	0.8	1.0	0.7	0.6	0.5	0.4	0.5	0.7	0.7	1.0	1.0	0.7
1980	1.0	0.8	0.9	0.6	0.6	0.5	0.4	0.5	0.8	1.1	0.8	1.1	0.8
1981	1.0	1.0	1.0	0.8	0.5	0.6	0.4	0.4	0.8	0.9	0.9	0.9	0.8
1982	1.4	1.1	1.3	0.9	0.7	0.5	0.4	0.4	0.7	0.9	1.1	1.2	0.9
1983	1.0	0.9	1.4	0.8	0.7	0.5	0.5	0.4	0.7	0.8	1.4	1.3	0.9
1984	1.1	1.0	1.1	1.0	0.6	0.5	0.5	0.4	0.7	1.0	1.2	1.3	0.9
1985	1.3	1.0	1.4	0.8	0.6	0.7	0.4	0.5	0.6	0.8	0.9	1.1	0.9
1986	1.1	0.8	1.2	1.0	0.6	0.5	0.4	0.4	0.8	0.7	1.2	1.1	0.8
1987	0.9	1.0	1.2	0.6	0.5	0.4	0.4	0.5	0.5	0.9	1.0	0.9	0.7
MEAN	1.2	1.1	1.1	0.9	0.7	0.6	0.5	0.5	0.7	0.9	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S92 (47.38N 89.45W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.9	5.9	3.4	2.9	1.9	1.7	1.6	2.6	4.1	4.3	4.5	
1957	3.5	3.2	3.1	4.2	3.1	3.0	2.3	1.8	2.8	2.5	4.1	4.4	
1958	3.4	3.2	2.4	4.1	3.2	2.1	2.5	1.8	3.2	3.6	5.1	3.8	
1959	3.2	3.9	4.0	3.6	4.0	1.8	2.2	2.2	3.3	3.2	4.4	5.0	
1960	3.5	3.7	3.6	3.8	3.2	1.9	2.1	3.0	2.7	3.4	4.4	3.3	
1961	3.1	3.2	3.6	3.4	2.1	1.7	2.4	2.2	2.9	2.8	4.7	3.5	
1962	3.7	3.6	3.8	3.2	2.5	1.5	2.4	1.5	2.8	4.8	3.5	4.2	
1963	3.5	3.6	3.1	3.3	2.0	2.4	1.7	1.7	2.2	2.5	3.5	4.4	
1964	4.4	4.8	3.1	3.6	2.6	1.9	1.5	2.5	3.3	3.9	4.2	3.2	
1965	4.2	4.4	3.8	3.0	3.1	2.3	1.7	1.7	3.2	3.5	6.4	4.9	
1966	5.9	3.7	6.9	4.8	3.5	3.6	2.3	3.0	3.3	4.9	4.9	4.4	
1967	6.6	3.8	4.3	4.8	3.9	3.0	3.6	2.5	4.2	4.7	3.9	4.9	
1968	3.6	5.4	5.1	4.4	3.0	2.4	3.5	3.5	3.4	4.0	5.4	5.7	
1969	4.9	3.5	4.2	3.1	2.2	2.6	1.6	2.8	2.2	3.6	3.2	3.9	
1970	3.0	3.4	4.3	4.1	3.2	1.7	1.9	2.2	3.4	3.6	3.5	4.0	
1971	3.4	4.1	4.9	2.8	3.3	1.7	2.1	1.8	2.2	4.4	4.1	3.6	
1972	3.9	3.9	3.7	3.2	1.7	2.0	1.6	1.4	3.4	4.2	3.4	5.2	
1973	3.0	2.8	3.7	3.1	3.0	1.5	2.0	1.2	3.1	2.9	3.2	3.5	
1974	4.2	3.0	3.6	3.2	2.6	1.7	2.7	2.5	1.7	2.7	3.1	3.7	
1975	5.2	4.1	5.3	2.8	1.4	1.9	2.3	2.7	2.7	4.4	4.5	3.3	
1976	3.7	4.0	5.1	3.1	2.3	1.9	1.2	2.1	2.8	2.7	3.4	4.4	
1977	4.0	5.7	5.7	2.2	2.2	1.5	3.1	2.0	4.2	3.2	4.3	5.0	
1978	3.2	2.6	3.7	3.0	1.7	1.5	1.3	1.7	3.1	3.3	3.5	3.4	
1979	3.0	3.9	3.5	3.8	2.5	1.6	2.2	1.7	2.3	2.6	3.0	2.9	
1980	4.7	3.5	3.7	2.1	1.7	1.6	1.1	2.0	3.5	3.8	2.9	4.2	
1981	2.9	2.9	3.4	3.6	1.5	3.5	1.2	1.3	4.4	3.2	3.6	2.8	
1982	4.2	2.8	5.9	4.0	2.1	3.0	2.1	1.5	2.3	3.2	4.9	3.8	
1983	3.1	4.0	4.4	2.9	1.8	2.0	2.3	1.9	2.8	2.8	4.2	3.7	
1984	4.1	3.0	4.0	3.4	2.5	2.2	2.5	1.7	2.2	3.7	4.3	4.0	
1985	3.7	3.6	6.7	3.5	2.4	3.7	1.4	2.2	3.5	3.2	2.7	3.8	
1986	4.3	3.7	3.4	3.4	2.8	1.4	1.7	1.3	2.8	2.9	4.5	3.4	
1987	3.1	4.3	4.3	2.4	2.7	1.3	1.5	2.0	1.8	3.0	3.2	3.1	

32 YR. STATISTICS FOR WIS STATION S92

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.0
DATE OF LARGEST HS OCCURENCE IS (YR,MO,DA,HR)		66030418

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	137	383	210	28							758
0.50-0.99		433	729	233	31						1426
1.00-1.49			389	111	116	18					634
1.50-1.99			167	97	72	60					396
2.00-2.49				109	12	75	6				202
2.50-2.99				24	3	11	21				59
3.00-3.49				1	1	3	9	3			17
3.50-3.99							1	3			4
4.00-4.49					1			3	1		5
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	137	816	1495	603	236	167	37	9	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 3287.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	158	428	168	13							767
0.50-0.99		335	726	172	14	2					1249
1.00-1.49			224	195	50	4					473
1.50-1.99			42	103	79	36					260
2.00-2.49				52	31	74	2				159
2.50-2.99				7	29	26	7				69
3.00-3.49					8	21	7	1			37
3.50-3.99						12	8				20
4.00-4.49						1	14	1			16
4.50-4.99						1	5	5			11
5.00-5.49								1	1		6
5.50-5.99								1	3		4
6.00-6.49									1		1
6.50-6.99											0
7.00+											2
TOTAL	158	763	1160	542	211	177	43	13	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 2892.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	222	617	241	22							1102
0.50-0.99		303	962	170	14	1					1450
1.00-1.49			280	325	34	2					641
1.50-1.99			25	151	104	7					287
2.00-2.49				49	40	49					138
2.50-2.99				1	55	31	3				90
3.00-3.49						40	10	2			52
3.50-3.99						20	14	4			38
4.00-4.49						1	19	7			27
4.50-4.99							3	10	1		14
5.00-5.49								4			4
5.50-5.99								2	2		4
6.00-6.49									1		1
6.50-6.99									1		1
7.00+											2
TOTAL	222	920	1508	718	247	151	49	29	6	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 3615.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	245	733	187	22							1187
0.50-0.99		421	1192	125	19	4					1761
1.00-1.49			353	342	27	5	1	1			729
1.50-1.99			18	172	85	10	1	1			287
2.00-2.49				58	39	35					132
2.50-2.99				1	63	23	4	1			92
3.00-3.49					5	71	6				82
3.50-3.99						24	24	2			50
4.00-4.49						4	22	8	1		35
4.50-4.99						1	7	20	2		30
5.00-5.49								14	3		17
5.50-5.99								5			5
6.00-6.49									3	2	5
6.50-6.99											4
7.00+											
TOTAL	245	1154	1750	720	238	177	65	52	16	6	

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 4153.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	441	1282	260	27	31	4	1	.	.	.	2010
0.50-0.99	.	933	2651	144	39	14	2	.	.	.	3764
1.00-1.49	.	.	853	742	39	14	2	.	.	.	1650
1.50-1.99	.	.	42	392	174	19	3	.	.	.	630
2.00-2.49	.	.	.	128	58	58	1	.	.	.	245
2.50-2.99	.	.	.	4	133	38	9	.	.	.	184
3.00-3.49	8	108	8	2	.	.	126
3.50-3.99	49	22	6	.	.	78
4.00-4.49	5	47	9	1	.	62
4.50-4.99	8	33	.	.	41
5.00-5.49	1	27	4	.	32
5.50-5.99	6	5	1	12
6.00-6.49	9
6.50-6.99	3
7.00+	5
TOTAL	441	2215	3806	1437	443	295	102	83	25	4	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 8295.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	355	812	160	14	25	5	.	.	.	.	1341
0.50-0.99	.	602	1429	102	25	11	.	.	.	.	2163
1.00-1.49	.	.	514	216	36	11	.	.	.	.	777
1.50-1.99	.	.	40	198	52	20	2	.	.	.	312
2.00-2.49	.	.	.	73	31	21	6	.	.	.	131
2.50-2.99	.	.	.	4	42	10	1	.	.	.	61
3.00-3.49	9	18	3	4	.	.	30
3.50-3.99	13	10	2	.	.	25
4.00-4.49	1	7	1	1	.	10
4.50-4.99	4	2	.	.	7
5.00-5.49	4	.	.	4
5.50-5.99	0
6.00-6.49	1	1
6.50-6.99	1	2
7.00+	2	2
TOTAL	355	1414	2143	607	195	99	33	13	3	4	

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 4566.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	336	836	178	29	5	14	2	.	.	.	1384
0.50-0.99	.	412	764	93	27	14	2	.	.	.	1312
1.00-1.49	.	.	311	31	19	18	.	.	.	.	378
1.50-1.99	.	.	26	78	6	9	6	.	.	.	125
2.00-2.49	.	.	.	36	3	3	1	2	.	.	45
2.50-2.99	.	.	.	5	5	2	2	.	.	.	14
3.00-3.49	2	1	1	2	.	.	6
3.50-3.99	1	.	.	.	.	1
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	336	1248	1279	272	67	48	12	4	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3065.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	356	957	139	17	3	14	1	.	.	.	1472
0.50-0.99	.	528	817	60	26	17	1	.	.	.	1446
1.00-1.49	.	.	266	28	19	17	.	.	.	.	330
1.50-1.99	.	.	20	79	3	2	4	.	.	.	108
2.00-2.49	.	.	.	27	1	3	2	.	.	.	33
2.50-2.99	.	.	.	3	6	.	1	2	.	.	12
3.00-3.49	1	.	.	.	.	.	1
3.50-3.99	0
4.00-4.49	1	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	356	1485	1242	214	59	36	8	3	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3190.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	304	913	175	18	2	1	.	.	.	.	1413
0.50-0.99	.	466	989	67	11	5	.	.	.	.	1538
1.00-1.49	.	.	349	72	16	8	1	.	.	.	446
1.50-1.99	.	.	28	137	4	4	.	1	.	.	174
2.00-2.49	.	.	.	48	5	1	.	.	.	.	54
2.50-2.99	.	.	.	2	16	.	1	.	.	.	19
3.00-3.49	2	.	1	.	.	.	3
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	304	1379	1541	344	56	19	3	1	0	0	3419.

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3419.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	264	868	192	21	.	.	.	.	.	.	1345
0.50-0.99	.	437	1365	94	19	5	.	.	.	.	1920
1.00-1.49	.	.	458	172	14	7	.	.	.	.	651
1.50-1.99	.	.	38	181	17	3	2	.	.	.	241
2.00-2.49	.	.	.	83	33	3	.	.	.	.	119
2.50-2.99	36	1	.	.	.	.	37
3.00-3.49	4	6	.	.	.	.	10
3.50-3.99	3	.	.	.	.	3
4.00-4.49	1	1	.	.	.	2
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	264	1305	2053	551	123	29	3	0	0	0	4056.

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 4056.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	285	1265	450	21	1	.	.	.	.	.	2022
0.50-0.99	.	624	2404	300	26	3	.	.	.	.	3357
1.00-1.49	.	.	451	534	42	6	1	.	.	.	1034
1.50-1.99	.	.	51	278	139	7	.	.	.	.	475
2.00-2.49	.	.	.	74	75	57	.	.	.	.	206
2.50-2.99	.	.	.	2	96	26	.	.	.	.	124
3.00-3.49	5	41	6	.	.	.	52
3.50-3.99	29	11	.	.	.	40
4.00-4.49	2	10	.	.	.	12
4.50-4.99	5	.	.	.	8
5.00-5.49	3	.	.	2
5.50-5.99	2	.	.	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	285	1889	3356	1209	384	171	33	5	0	0	6870.

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 6870.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	377	2096	648	17	1	.	.	.	.	.	3139
0.50-0.99	.	991	4435	456	27	3	1	.	.	.	5913
1.00-1.49	.	.	930	1295	112	7	1	.	.	.	2345
1.50-1.99	.	.	85	563	389	26	.	.	.	.	1063
2.00-2.49	.	.	.	185	137	152	.	.	.	.	474
2.50-2.99	.	.	.	3	228	113	5	1	.	.	350
3.00-3.49	11	202	8	1	.	.	222
3.50-3.99	111	39	2	.	.	152
4.00-4.49	4	65	5	.	.	74
4.50-4.99	14	.	.	.	36
5.00-5.49	21	1	.	18
5.50-5.99	4	5	.	9
6.00-6.49	3	.	3
6.50-6.99	2	.	2
7.00+	1	.	1
TOTAL	377	3087	6098	2519	905	618	133	50	14	0	12920.

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 12920.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 17281.

STATION 593 47.67N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 8087.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 4383.

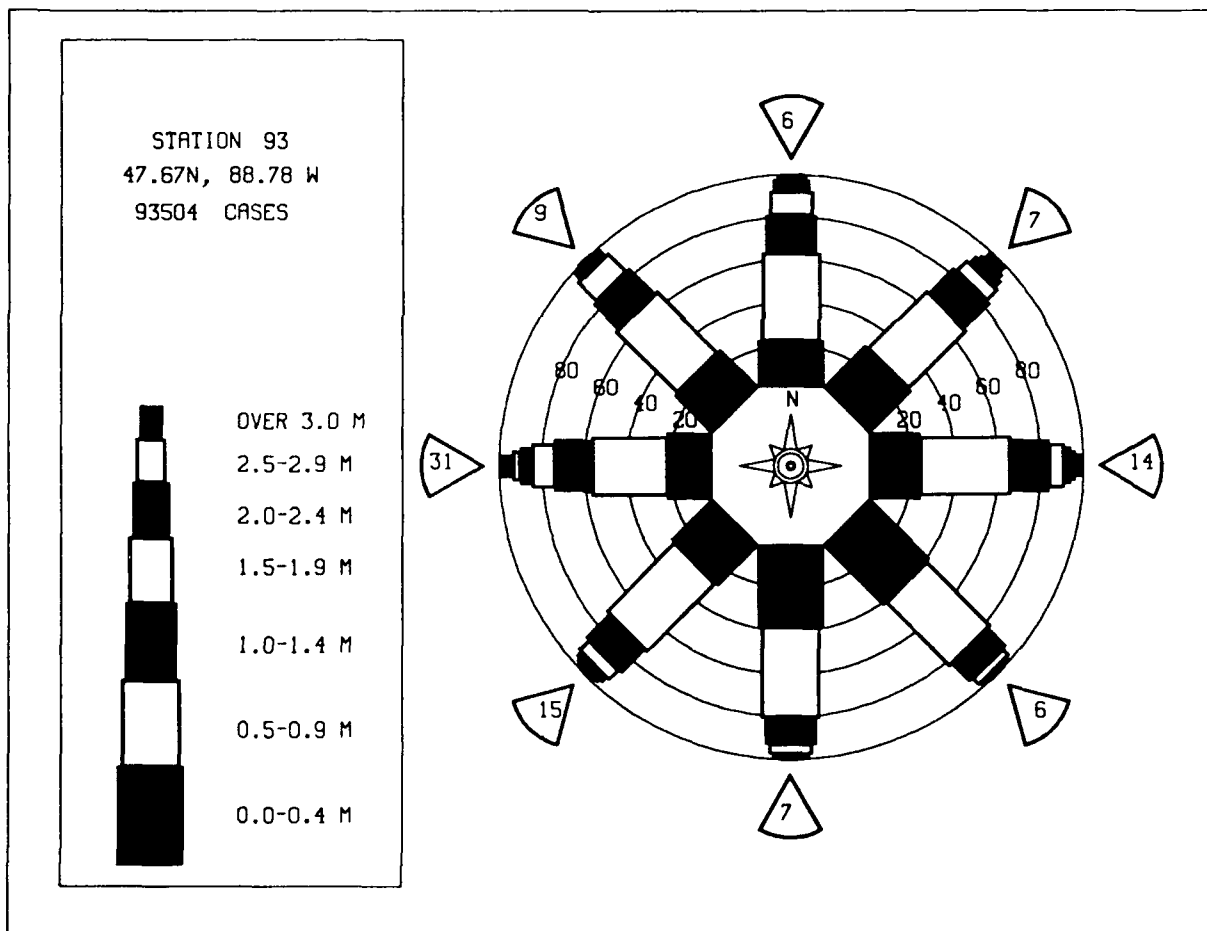
STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3425.

STATION S93 47.67N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	469	1598	458	38	1						2564
0.50-0.99		1011	2649	296	44	8					4008
1.00-1.49			852	676	82	18					1628
1.50-1.99			134	499	185	34	2				854
2.00-2.49			5	186	111	84	2				388
2.50-2.99				12	137	54	6				209
3.00-3.49					11	113	8	1			133
3.50-3.99						60	23	2			85
4.00-4.49						4	40	3			47
4.50-4.99							12	15			27
5.00-5.49								13	1		14
5.50-5.99								3	2		5
6.00-6.49									3		3
6.50-6.99									1		1
7.00+										1	1
TOTAL	469	2609	4098	1707	571	375	93	37	7	1	

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S93 (47.67N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.8	1.3	1.3	1.1	0.8	0.6	0.6	0.5	0.7	1.2	1.3	1.3	1.0
1957	1.3	1.3	1.3	1.1	0.8	0.6	0.6	0.5	0.7	1.2	1.3	1.3	1.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1976	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1977	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1978	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1979	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1987	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.3	1.2	1.2	0.9	0.8	0.6	0.5	0.6	0.8	1.0	1.3	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S93 (47.67N 88.78W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1957	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1958	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1959	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1960	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1961	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1962	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1963	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1964	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1965	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1966	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1967	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1968	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1969	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1970	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1971	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1972	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1973	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1974	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1975	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1976	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1977	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1978	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1979	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1980	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1981	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1982	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1983	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1984	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1985	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1986	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	
1987	4.0	4.0	7.0	6.0	3.0	1.0	1.0	1.0	2.0	4.0	4.0	5.0	

32 YR. STATISTICS FOR WIS STATION S93

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	4.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	270.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	8.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	276.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		66012715

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	101	525	116								742
0.50-0.99		242	157	51	5						1873
1.00-1.49			408	547	33						988
1.50-1.99			24	379	144						555
2.00-2.49				129	118	7	1				256
2.50-2.99				1	195	23	1				219
3.00-3.49					5	122					127
3.50-3.99						49					49
4.00-4.49						6					10
4.50-4.99							5				5
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	101	767	2123	1107	500	215	11	0	0	0	
MEAN HS (M) = 1.1	LARGEST HS (M) = 4.9		MEAN TP (SEC) = 4.7		NO. OF CASES = 4522.						

MEAN HS(M) = 1.1 LARGEST HS(M) = 4.9 MEAN TP(SEC) = 4.7 NO. OF CASES = 4522.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	81	441	89								611
0.50-0.99		221	1349	54	5						1629
1.00-1.49			268	425	21						714
1.50-1.99			9	204	91	9					313
2.00-2.49				52	67	23					142
2.50-2.99					81	21					102
3.00-3.49					1	79					80
3.50-3.99						44	2				46
4.00-4.49							8				10
4.50-4.99											0
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	81	662	1715	735	266	178	10	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M) = 4.4 MEAN TP(SEC) = 4.6 NO. OF CASES = 3421.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	158	706	105	1							970
0.50-0.99		294	1694	51	6						2045
1.00-1.49			344	515	24	3					886
1.50-1.99			13	198	117	6	2				336
2.00-2.49				37	63	25					125
2.50-2.99					71	37					108
3.00-3.49					2	72					74
3.50-3.99						47	9				56
4.00-4.49							8				8
4.50-4.99							1	1			2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	158	1000	2156	802	283	190	20	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M) = 4.6 MEAN TP(SEC) = 4.4 NO. OF CASES = 4322.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	182	660	66								908
0.50-0.99		391	1622	37	5						2433
1.00-1.49			313	437	26						780
1.50-1.99				196	78	8					293
2.00-2.49			11	42	59	17	4				122
2.50-2.99					65	23					88
3.00-3.49						36		1	1		57
3.50-3.99						23	1				24
4.00-4.49							6				9
4.50-4.99							1	1			2
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	182	1051	2012	712	233	132	14	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M) = 4.9 MEAN TP(SEC) = 4.3 NO. OF CASES = 4068.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	189	765	81	4	6	.	.	.	.	.	1039
0.50-0.99	.	402	1413	73	6	.	.	.	.	.	1894
1.00-1.49	.	.	253	274	39	.	.	.	.	.	566
1.50-1.99	.	.	8	171	47	20	.	.	.	.	246
2.00-2.49	.	.	.	65	40	10	2	.	.	.	117
2.50-2.99	82	8	1	.	.	.	71
3.00-3.49	9	40	1	.	.	.	50
3.50-3.99	21	2	.	.	.	23
4.00-4.49	6	1	.	.	.	7
4.50-4.99	3	.	.	.	3
5.00-5.49	1	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	189	1167	1755	587	203	105	10	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 3767.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	168	553	69	.	.	.	.	.	.	.	790
0.50-0.99	.	267	865	51	1	.	.	.	.	.	1184
1.00-1.49	.	.	193	204	26	3	.	.	.	.	426
1.50-1.99	.	.	4	104	44	11	.	.	.	.	163
2.00-2.49	.	.	.	34	32	36	2	.	.	.	104
2.50-2.99	.	.	.	2	31	14	3	.	.	.	50
3.00-3.49	23	1	1	.	.	25
3.50-3.99	9	2	1	.	.	12
4.00-4.49	1	3	.	.	.	5
4.50-4.99	2	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	168	820	1131	395	134	97	11	5	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 2593.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	220	824	362	1	.	.	.	.	.	.	1407
0.50-0.99	.	363	1836	331	9	.	.	.	.	.	2539
1.00-1.49	.	.	327	434	144	5	.	.	.	.	910
1.50-1.99	.	.	11	189	145	50	1	.	.	.	396
2.00-2.49	.	.	.	56	68	49	1	.	.	.	174
2.50-2.99	72	25	3	2	.	.	102
3.00-3.49	3	50	3	3	.	.	59
3.50-3.99	22	4	2	.	.	28
4.00-4.49	2	23	.	.	.	25
4.50-4.99	1	10	.	.	11
5.00-5.49	8	.	.	8
5.50-5.99	3	.	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	220	1187	2536	1011	441	203	36	28	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5307.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	268	1335	645	4	.	.	.	.	.	.	2252
0.50-0.99	.	490	3161	520	6	.	.	.	.	.	4177
1.00-1.49	.	.	401	929	269	5	.	.	.	.	1604
1.50-1.99	.	.	14	228	340	68	.	.	.	.	650
2.00-2.49	.	.	.	73	106	117	3	.	.	.	299
2.50-2.99	.	.	.	1	91	64	8	1	.	.	165
3.00-3.49	10	83	6	.	.	.	99
3.50-3.99	40	25	.	.	.	65
4.00-4.49	5	37	1	.	.	43
4.50-4.99	6	7	.	.	13
5.00-5.49	9	.	.	9
5.50-5.99	3	5	.	8
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	268	1825	4221	1755	822	382	85	21	6	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 8793.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	240	1104	388	6	.	.	.	.	.	.	1738
0.50-0.99	.	458	2017	365	8	.	.	.	.	.	2848
1.00-1.49	.	.	425	790	142	7	.	.	.	.	1364
1.50-1.99	.	.	29	220	233	32	.	.	.	.	514
2.00-2.49	.	.	.	79	86	88	4	.	.	.	257
2.50-2.99	.	.	.	3	90	42	11	1	.	.	140
3.00-3.49	7	25	11	1	.	.	94
3.50-3.99	53	23	5	.	.	79
4.00-4.49	3	17	5	.	.	25
4.50-4.99	6	4	.	.	10
5.00-5.49	2	6	.	.	8
5.50-5.99	2	1	.	3
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	240	1562	2859	1463	566	302	67	20	1	0	6636

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 6636.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	221	799	182	129	3	.	.	.	.	.	1202
0.50-0.99	.	370	1236	270	37	1	.	.	.	.	1738
1.00-1.49	.	.	344	228	31	6	.	.	.	.	652
1.50-1.99	.	.	36	71	26	6	.	.	.	.	341
2.00-2.49	.	.	.	2	60	18	1	.	.	.	151
2.50-2.99	7	33	9	.	.	.	81
3.00-3.49	5	6	.	.	.	41
3.50-3.99	4	.	.	.	15
4.00-4.49	1	.	.	.	9
4.50-4.99	1	.	.	.	1
5.00-5.49	1	.	.	.	1
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	221	1169	1798	700	232	98	14	0	0	0	3969

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 3969.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	262	1075	425	6	.	.	.	.	.	.	1768
0.50-0.99	.	430	1654	379	7	.	.	.	.	.	2470
1.00-1.49	.	.	355	346	130	6	.	.	.	.	837
1.50-1.99	.	.	38	244	106	28	1	.	.	.	417
2.00-2.49	.	.	.	104	84	25	4	.	.	.	217
2.50-2.99	.	.	.	2	70	23	3	1	.	.	99
3.00-3.49	17	56	5	.	.	.	78
3.50-3.99	23	7	2	.	.	32
4.00-4.49	1	1	.	.	.	2
4.50-4.99	1	3	2	.	.	6
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	262	1505	2472	1081	414	163	24	5	0	0	5556

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5556.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	287	1666	714	38	148	2	.	.	.	.	2705
0.50-0.99	.	689	2996	830	320	139	.	.	.	.	4665
1.00-1.49	.	.	740	775	320	139	12	.	.	.	1974
1.50-1.99	.	.	35	486	188	221	12	.	.	.	942
2.00-2.49	.	.	.	168	162	136	69	12	.	.	547
2.50-2.99	.	.	.	4	224	57	41	22	.	.	348
3.00-3.49	36	144	9	14	2	.	205
3.50-3.99	1	90	12	18	6	.	125
4.00-4.49	11	25	8	7	.	50
4.50-4.99	6	8	7	2	.	28
5.00-5.49	4	9	1	.	15
5.50-5.99	1	.	.	3
6.00-6.49	1	2	3
6.50-6.99	1	2	3
7.00+	0
TOTAL	287	2355	4485	2301	1079	806	180	91	24	4	10882

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 10882.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	290	1891	245	11							2437
0.50-0.99		750	3033	163	57	2					4005
1.00-1.49			948	891	102	119					2060
1.50-1.99			29	770	192	109	17				1117
2.00-2.49				257	278	50	39	24			648
2.50-2.99				5	325	59		16	1		405
3.00-3.49					48	223		9	1		283
3.50-3.99						103			4		110
4.00-4.49						38	13	1			56
4.50-4.99						4					15
5.00-5.49							1	1	1	2	5
5.50-5.99											0
6.00-6.49									1		1
6.50-6.99											0
7.00+											0
TOTAL	290	2641	4255	2097	1002	701	89	53	12	2	10437

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 10437.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	240	1324	142	2							1708
0.50-0.99		490	2462	68	4						3024
1.00-1.49			737	798	10	6					1551
1.50-1.99			17	662	162	8					849
2.00-2.49				177	236	8	3				424
2.50-2.99				4	242	22	1	1			270
3.00-3.49					31	144					175
3.50-3.99						62	1				63
4.00-4.49						13	8				21
4.50-4.99							2				2
5.00-5.49							1	1			2
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	240	1814	3358	1711	685	263	16	2	0	0	7576

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 7576.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	125	784	131	4							1044
0.50-0.99		371	2263	45	1						2680
1.00-1.49			620	871	10						1501
1.50-1.99			19	665	197	1					882
2.00-2.49				162	284	12					458
2.50-2.99					364	49					413
3.00-3.49					9	182					191
3.50-3.99						36					36
4.00-4.49						3					7
4.50-4.99							4				6
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	125	1155	3033	1747	865	283	10	0	0	0	6760

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 6760.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	87	511	96								694
0.50-0.99		219	1588	63	4						1874
1.00-1.49			452	700	16						1168
1.50-1.99			27	462	170	3					662
2.00-2.49				130	186	5					321
2.50-2.99				2	251	51					304
3.00-3.49					7	139					146
3.50-3.99						40	1				42
4.00-4.49						7	5				12
4.50-4.99							4				4
5.00-5.49											0
5.50-5.99											0
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	87	730	2163	1357	634	245	10	1	0	0	4895

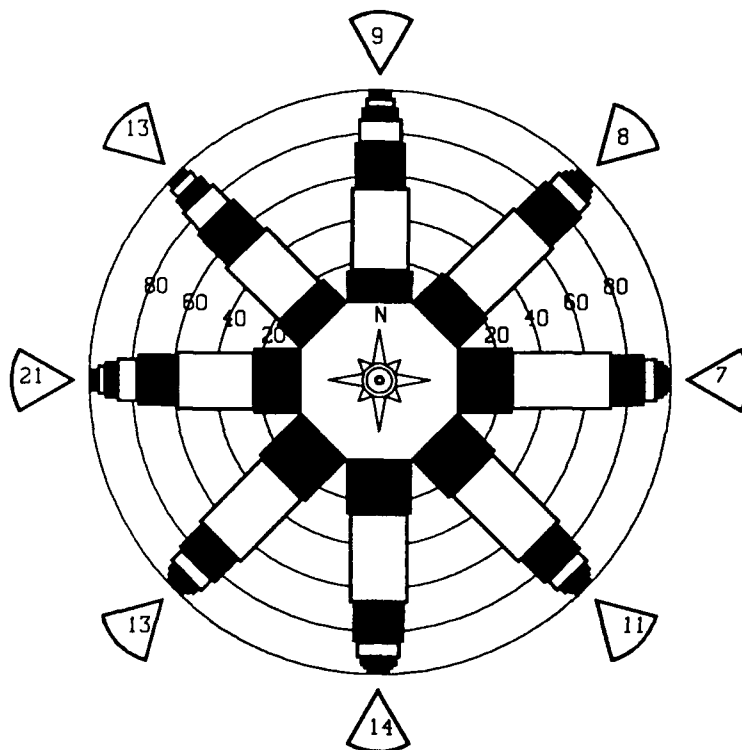
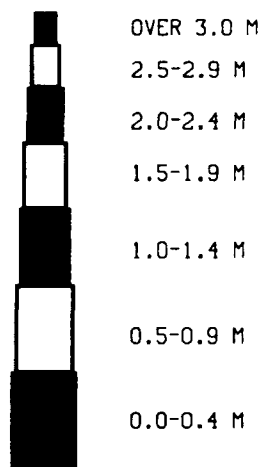
MEAN HS(M) = 1.2 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 4895.

STATION S94 47.95N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	312	1497	386	8	28	.	.	.	.	.	2203
0.50-0.99	.	645	3076	321	135	30	.	.	.	.	4070
1.00-1.49	.	.	713	921	233	59	3	.	.	.	1799
1.50-1.99	.	.	33	541	233	64	.	.	.	.	869
2.00-2.49	.	.	.	164	193	53	13	3	.	.	437
2.50-2.99	.	.	.	2	230	19	7	4	.	.	296
3.00-3.49	152	4	3	.	.	178
3.50-3.99	68	10	1	.	.	80
4.00-4.49	10	17	.	1	.	29
4.50-4.99	1	5	.	.	.	6
5.00-5.49	3	.	.	3
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	312	2142	4208	1957	838	437	59	19	1	0	93504

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.

STATION 94
47.95N, 87.50 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S94 (47.95N 87.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.1	1.0	0.9	0.6	0.5	0.5	0.5	0.6	1.1	1.1	1.1	0.8
1957	1.2	1.1	1.2	0.9	0.8	0.6	0.5	0.5	0.8	0.8	1.1	1.2	0.9
1958	0.8	1.1	1.2	0.8	0.8	0.6	0.5	0.5	0.8	0.8	1.1	1.1	0.8
1959	1.0	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.8	0.8	1.1	1.2	0.8
1960	1.1	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.7	0.8	1.1	1.1	0.8
1961	0.9	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.8	0.8	1.0	1.0	0.8
1962	1.3	0.8	0.7	0.7	0.6	0.4	0.4	0.4	0.6	0.8	1.1	1.3	0.8
1963	1.2	1.3	1.2	0.9	0.7	0.5	0.6	0.5	0.7	0.9	1.2	1.3	0.9
1964	1.2	1.3	1.1	0.9	0.8	0.6	0.6	0.5	0.8	1.1	1.1	1.1	1.0
1965	1.1	1.2	1.1	0.9	0.8	0.8	0.7	0.8	0.9	1.1	1.3	1.1	1.1
1966	1.5	1.7	1.6	1.2	1.2	0.7	0.7	0.7	1.1	1.6	1.7	1.6	1.3
1967	1.7	1.7	1.6	1.2	1.2	0.9	0.7	0.8	1.1	2.1	1.6	2.0	1.4
1968	1.5	2.1	1.7	1.3	1.1	0.3	0.8	0.8	1.1	1.8	2.0	1.7	1.4
1969	1.7	1.4	1.1	0.9	0.9	0.7	0.6	0.8	1.1	1.5	1.6	1.1	1.1
1970	1.2	1.1	1.2	1.1	1.0	0.7	0.6	0.6	1.2	1.2	1.7	1.2	1.1
1971	1.4	1.3	1.1	1.0	0.8	0.5	0.6	0.6	0.9	1.1	1.5	1.1	1.1
1972	1.5	1.2	1.2	0.8	0.5	0.5	0.5	0.6	1.2	1.1	1.3	1.1	1.0
1973	1.2	1.2	1.1	1.0	0.6	0.6	0.6	0.5	1.1	1.1	1.2	1.1	1.0
1974	1.1	1.1	1.2	0.9	0.7	0.7	0.6	0.8	0.9	1.1	1.3	1.1	1.0
1975	1.0	0.8	0.8	0.5	0.5	0.7	0.6	0.7	1.0	1.1	1.4	1.2	0.9
1976	1.4	1.4	1.5	0.8	0.7	0.6	0.6	0.6	0.8	0.8	1.1	1.2	1.0
1977	1.3	1.5	1.5	0.6	0.5	0.5	0.5	0.6	0.8	0.9	1.1	1.3	0.9
1978	2.2	0.8	0.9	0.9	0.6	0.5	0.7	0.7	0.9	1.1	2.2	1.3	0.9
1979	2.0	0.8	0.9	0.7	0.7	0.7	0.5	0.7	0.9	1.1	2.2	1.3	0.9
1980	1.1	0.8	1.1	0.7	0.7	0.6	0.5	0.7	1.2	1.5	1.1	1.3	0.9
1981	1.0	1.1	1.1	0.8	0.6	0.6	0.4	0.4	1.0	1.3	1.3	1.0	0.9
1982	1.6	1.2	1.5	1.0	0.7	0.6	0.5	0.5	1.1	1.4	1.1	1.1	1.1
1983	1.3	1.0	1.4	0.7	0.7	0.6	0.5	0.5	1.0	1.2	1.2	1.4	1.0
1984	2.2	1.1	1.2	0.9	0.7	0.7	0.5	0.5	1.1	1.4	1.1	1.5	1.0
1985	1.5	1.2	1.4	0.8	0.7	0.8	0.7	0.7	1.1	1.4	1.1	1.4	1.1
1986	1.3	0.9	1.2	1.1	0.7	0.6	0.5	0.6	1.0	1.1	1.5	1.3	1.0
1987	1.1	1.1	1.2	0.7	0.6	0.4	0.5	0.6	0.6	1.0	1.2	1.1	0.9
MEAN	1.2	1.2	1.2	0.9	0.8	0.6	0.5	0.6	0.9	1.2	1.4	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S94 (47.95N 87.50W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.2	3.4	4.2	3.0	2.3	1.6	1.5	1.3	2.5	3.7	3.4	3.4	
1957	3.0	3.3	3.0	2.7	3.0	2.9	2.6	1.9	2.9	2.4	3.4	3.7	
1958	3.2	3.3	2.2	4.2	2.8	2.2	2.1	1.7	2.9	3.0	3.2	3.6	
1959	3.0	4.1	3.3	3.1	3.8	1.7	2.0	2.0	2.6	3.3	3.8	4.4	
1960	3.0	2.8	3.1	3.2	2.5	1.5	1.8	3.0	2.6	3.4	3.5	3.8	
1961	3.5	2.8	3.6	2.9	2.2	1.6	1.6	2.0	2.6	2.8	4.1	3.5	
1962	3.6	2.9	3.0	2.9	2.1	1.4	1.8	1.5	2.6	4.3	3.2	4.2	
1963	3.4	3.8	3.8	3.3	2.2	1.7	1.7	1.7	2.8	2.7	4.1	4.5	
1964	3.8	3.9	3.7	4.5	3.5	1.9	1.3	2.6	3.3	3.9	4.2	3.1	
1965	3.9	4.3	4.1	3.1	2.7	2.3	1.7	2.2	3.3	3.7	5.2	3.6	
1966	5.3	3.9	4.9	4.2	3.6	3.1	2.5	2.7	3.4	5.1	4.2	4.3	
1967	3.9	4.0	4.1	4.0	4.3	3.3	2.7	2.7	4.0	6.2	3.3	5.1	
1968	4.6	4.7	4.5	3.8	3.0	2.7	3.1	3.0	3.2	5.7	4.3	4.9	
1969	3.8	3.5	4.2	2.7	2.8	2.2	1.8	2.8	3.1	4.4	5.1	3.7	
1970	3.2	3.8	4.7	3.8	3.6	2.0	2.6	2.0	4.8	5.7	5.7	3.7	
1971	3.4	4.0	3.8	3.0	3.1	1.7	2.1	1.3	3.4	5.3	5.7	4.0	
1972	4.3	3.7	3.9	2.8	1.6	1.6	1.2	1.7	4.1	4.6	3.9	3.2	
1973	3.0	3.1	3.5	2.9	3.3	1.9	1.7	1.2	4.0	3.5	4.0	3.8	
1974	4.0	3.4	3.4	2.7	2.6	2.4	1.9	2.2	2.4	3.6	5.3	3.4	
1975	4.0	3.1	2.3	1.2	1.9	2.4	1.8	2.6	3.7	6.1	5.5	3.6	
1976	4.1	4.1	4.4	3.1	2.8	2.2	1.2	2.5	2.9	3.1	3.4	4.4	
1977	4.5	4.1	4.0	2.8	2.1	1.5	2.9	2.3	5.3	3.1	6.0	4.0	
1978	3.7	3.0	4.0	3.0	2.6	1.7	1.3	1.8	2.7	3.8	3.8	4.1	
1979	3.4	2.9	3.6	3.7	2.9	3.6	1.7	2.4	2.3	4.3	5.5	3.2	
1980	5.0	2.8	3.7	3.1	1.8	1.3	1.6	2.7	4.8	5.3	3.7	4.1	
1981	3.2	2.9	3.4	3.1	1.8	2.9	1.1	1.5	5.1	4.5	3.8	2.8	
1982	4.3	3.3	6.8	4.5	2.7	2.2	2.0	1.6	3.8	4.4	5.8	3.8	
1983	4.4	4.6	3.8	2.6	1.8	1.6	2.4	2.3	3.0	4.4	4.5	4.7	
1984	4.6	3.4	4.7	3.4	2.1	3.0	1.7	1.9	4.4	5.0	5.8	4.7	
1985	4.1	3.6	5.2	3.6	1.9	3.2	1.5	2.8	4.7	4.4	3.6	4.2	
1986	4.1	3.1	4.1	3.0	2.7	1.5	1.5	2.0	3.2	4.6	5.6	3.4	
1987	2.9	4.9	3.5	2.7	2.5	1.3	1.7	2.2	2.3	3.9	3.5	3.5	

32 YR. STATISTICS FOR WIS STATION S94

MEAN SIGNIFICANT WAVE HEIGHT (METERS)	1.0
MEAN PEAK WAVE PERIOD (SECONDS)	4.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	247.5
STANDARD DEVIATION OF WAVE HS (METERS)	0.7
STANDARD DEVIATION OF WAVE TP (SECONDS)	1.3
LARGEST WAVE HS (METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)	251.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	82031318

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	118	725	198	3	.	.	.	.	.	.	1044
0.50-0.99	.	397	2296	174	3	.	.	.	.	.	2870
1.00-1.49	.	.	583	859	56	.	.	.	.	.	1498
1.50-1.99	.	.	41	433	243	13	.	.	.	.	730
2.00-2.49	.	.	.	207	162	98	.	.	.	.	468
2.50-2.99	.	.	1	1	249	54	3	.	.	.	307
3.00-3.49	19	270	8	.	.	.	297
3.50-3.99	141	47	.	.	.	188
4.00-4.49	14	115	5	.	.	134
4.50-4.99	40	33	.	.	73
5.00-5.49	3	32	.	.	35
5.50-5.99	16	1	.	17
6.00-6.49	6	1	.	7
6.50-6.99	6	.	6
7.00+	1	.	1
TOTAL	118	1122	3119	1677	732	590	216	92	9	0	

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 7192.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	120	721	139	.	.	.	.	.	.	.	980
0.50-0.99	.	357	1947	100	1	.	.	.	.	.	2405
1.00-1.49	.	.	404	547	33	.	.	.	.	.	984
1.50-1.99	.	.	9	286	87	5	.	.	.	.	387
2.00-2.49	.	.	.	110	70	19	.	.	.	.	199
2.50-2.99	.	.	.	2	142	12	1	.	.	.	157
3.00-3.49	4	109	1	.	.	.	114
3.50-3.99	52	12	1	.	.	65
4.00-4.49	5	18	.	.	.	23
4.50-4.99	6	5	.	.	11
5.00-5.49	5	.	.	5
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	120	1078	2499	1045	337	202	38	11	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4995.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	125	850	157	2	.	.	.	.	.	.	1134
0.50-0.99	.	343	1818	101	.	.	.	.	.	.	2262
1.00-1.49	.	.	391	498	20	.	.	.	.	.	909
1.50-1.99	.	.	14	250	71	3	.	.	.	.	338
2.00-2.49	.	.	.	104	77	10	.	.	.	.	191
2.50-2.99	.	.	.	1	114	20	.	.	.	.	135
3.00-3.49	2	75	.	.	.	.	77
3.50-3.99	25	.	.	.	.	25
4.00-4.49	4	8	.	.	.	12
4.50-4.99	4	.	.	.	4
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	125	1193	2380	956	284	137	12	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 4766.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	99	543	112	2	.	.	.	.	.	.	756
0.50-0.99	.	275	1346	55	.	.	.	.	.	.	1676
1.00-1.49	.	.	285	280	8	.	.	.	.	.	573
1.50-1.99	.	.	4	139	55	.	.	.	.	.	198
2.00-2.49	.	.	.	41	59	14	.	.	.	.	114
2.50-2.99	42	22	1	.	.	.	65
3.00-3.49	2	35	2	.	.	.	39
3.50-3.99	12	2	.	.	.	14
4.00-4.49	6	.	.	.	6
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	99	818	1747	517	166	83	11	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3228.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	91	502	108	3	.	.	.	.	.	.	704
0.50-0.99	.	220	1032	55	.	.	.	.	.	.	1307
1.00-1.49	.	.	201	283	10	.	.	.	.	.	494
1.50-1.99	.	.	3	89	73	3	.	.	.	.	168
2.00-2.49	.	.	.	23	39	22	.	.	.	.	84
2.50-2.99	31	23	1	.	.	.	55
3.00-3.49	1	42	12	.	.	.	45
3.50-3.99	17	10	.	.	.	27
4.00-4.49	1	8	.	.	.	9
4.50-4.99	1	1	.	.	2
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	91	722	1344	453	154	108	22	1	0	0	0
TOTAL	91	722	1344	453	154	108	22	1	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 2717.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	71	350	68	1	.	.	.	.	.	.	490
0.50-0.99	.	150	873	50	.	.	.	.	.	.	1073
1.00-1.49	.	.	199	278	16	.	.	.	.	.	493
1.50-1.99	.	.	2	117	86	.	.	.	.	.	205
2.00-2.49	.	.	.	20	37	32	.	.	.	.	127
2.50-2.99	1	21	.	.	.	.	58
3.00-3.49	26	3	.	.	.	30
3.50-3.99	9	4	.	.	.	13
4.00-4.49	2	.	.	.	2
4.50-4.99	1	.	.	1
5.00-5.49	2	.	.	2
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	71	500	1142	466	215	88	9	3	0	0	0
TOTAL	71	500	1142	466	215	88	9	3	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 2342.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	82	504	140	1	.	.	.	.	.	.	727
0.50-0.99	.	317	1599	103	.	.	.	.	.	.	2019
1.00-1.49	.	.	300	451	32	.	.	.	.	.	783
1.50-1.99	.	.	11	171	124	9	.	.	.	.	315
2.00-2.49	.	.	.	45	72	34	.	.	.	.	151
2.50-2.99	77	13	1	.	.	.	91
3.00-3.49	7	36	2	.	.	.	45
3.50-3.99	2	1	.	.	.	3
4.00-4.49	0
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	82	821	2050	771	312	94	7	0	0	0	0
TOTAL	82	821	2050	771	312	94	7	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 3878.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	120	713	129	4	.	.	.	.	.	.	966
0.50-0.99	.	405	1709	54	.	.	.	.	.	.	2168
1.00-1.49	.	.	362	388	16	.	.	.	.	.	766
1.50-1.99	.	.	11	183	93	5	.	.	.	.	292
2.00-2.49	.	.	.	63	82	9	.	.	.	.	154
2.50-2.99	.	.	.	2	88	4	1	.	.	.	94
3.00-3.49	3	31	.	.	.	.	33
3.50-3.99	5	.	.	.	.	5
4.00-4.49	1	.	.	.	1
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	120	1118	2211	694	282	54	2	0	0	0	0
TOTAL	120	1118	2211	694	282	54	2	0	0	0	0

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4198.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	191	932	142	43	1	.	.	.	.	.	1265
0.50-0.99	.	603	2305	633	12	.	.	.	.	.	2852
1.00-1.49	.	.	675	606	155	1	.	.	.	.	1320
1.50-1.99	.	.	35	144	227	7	.	.	.	.	797
2.00-2.49	.	.	.	3	315	13	.	.	.	.	378
2.50-2.99	7	100	.	.	.	.	331
3.00-3.49	39	.	.	.	.	107
3.50-3.99	17	7	1	.	.	40
4.00-4.49	24
4.50-4.99	0
5.00-5.49	0
5.50-5.99	0
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	191	1535	3157	1429	717	177	7	1	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 6756.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	127	1027	152	8	1	.	.	.	.	.	1314
0.50-0.99	.	625	3672	80	1	.	.	.	.	.	4378
1.00-1.49	.	.	988	1220	9	.	.	.	.	.	2217
1.50-1.99	.	.	73	799	382	1	.	.	.	.	1255
2.00-2.49	.	.	.	212	348	60	.	.	.	.	620
2.50-2.99	.	.	.	4	315	97	.	.	.	.	416
3.00-3.49	12	264	.	.	.	.	276
3.50-3.99	115	14	.	.	.	129
4.00-4.49	11	44	.	.	.	55
4.50-4.99	7	5	.	.	12
5.00-5.49	2	.	.	2
5.50-5.99	1	.	.	1
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	127	1652	4885	2323	1067	548	65	8	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 9997.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	102	801	159	2	3	.	.	.	.	.	1064
0.50-0.99	.	485	2171	73	3	.	.	.	.	.	2732
1.00-1.49	.	.	580	717	11	.	.	.	.	.	1308
1.50-1.99	.	.	28	379	175	2	.	.	.	.	584
2.00-2.49	.	.	.	109	150	43	.	.	.	.	302
2.50-2.99	.	.	.	1	128	60	.	.	.	.	189
3.00-3.49	5	130	.	.	.	.	135
3.50-3.99	78	12	.	.	.	90
4.00-4.49	1	32	.	.	.	33
4.50-4.99	2	3	.	.	5
5.00-5.49	1	.	.	1
5.50-5.99	5	.	.	5
6.00-6.49	1	.	.	1
6.50-6.99	0
7.00+	0
TOTAL	102	1286	2938	1281	472	314	46	10	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 6042.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	109	633	142	7	4	1	.	.	.	.	891
0.50-0.99	.	362	1787	84	1	1	.	.	.	.	2238
1.00-1.49	.	.	483	592	14	2	.	.	.	.	1091
1.50-1.99	.	.	26	288	140	3	.	.	.	.	457
2.00-2.49	.	.	.	80	113	50	.	.	.	.	243
2.50-2.99	89	44	.	.	.	.	133
3.00-3.49	3	115	1	.	.	.	119
3.50-3.99	49	11	.	.	.	60
4.00-4.49	17	.	.	.	17
4.50-4.99	5	5	.	.	10
5.00-5.49	3	.	.	3
5.50-5.99	2	.	.	2
6.00-6.49	1	.	1
6.50-6.99	0
7.00+	0
TOTAL	109	995	2438	1051	363	264	34	10	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 4934.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) -270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	145	897	198	1							1241
0.50-0.99	.	451	2398	111	7	1	.	.	.	.	2968
1.00-1.49	.	1	688	842	43	7	2	.	1	.	1584
1.50-1.99	.	.	45	411	205	8	.	1	1	.	671
2.00-2.49	.	.	.	149	130	66	.	.	.	.	345
2.50-2.99	.	.	.	1	136	74	1	.	.	.	212
3.00-3.49	6	168	7	.	.	.	177
3.50-3.99	1	63	1	1	.	.	72
4.00-4.49	4	4	.	.	.	49
4.50-4.99	6	3	.	.	9
5.00-5.49	3	.	.	5
5.50-5.99	2	.	.	2
6.00-6.49	1	.	1
6.50-6.99	1	.	1
7.00+	0
TOTAL	145	1349	3329	1515	528	391	64	12	4	0	
MEAN HS(M) = 1.1	LARGEST HS(M) = 6.5		MEAN TP(SEC) = 4.6		NO. OF CASES = 6877.						

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0- LONGER	
0.00-0.49	117	1160	479	25	2						1783
0.50-0.99		524	2969	513	53	7	1				4067
1.00-1.49		1	705	1116	299	52	12	3			2188
1.50-1.99				445	360	133	16	4			1012
2.00-2.49			54	159	171	151	13	3	1		498
2.50-2.99				5	162	82	21	4	2	2	278
3.00-3.49					13	161	18	6	3		201
3.50-3.99						122	34	3	1		160
4.00-4.49						11	59	12			82
4.50-4.99							17	17	2		36
5.00-5.49								6	2		8
5.50-5.99								3			3
6.00-6.49											0
6.50-6.99											0
7.00+											0
TOTAL	117	1685	4207	2263	1060	719	191	61	11	2	
MEAN HS(M) = 1.1	LARGEST HS(M) = 5.9		MEAN TP(SEC) = 4.9		NO. OF CASES = 9667.						

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METRES)	PEAK PERIOD (SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	98	752	403	3		.	.	.	.	.	1256
0.50-0.99		361	2837	519	13		.	.	.	.	3730
1.00-1.49	.	.	563	1289	245	9	.	.	.	.	2106
1.50-1.99	.	.	45	392	555	114	1	.	.	.	1107
2.00-2.49	.	.		126	143	265	7	.	.	.	541
2.50-2.99	.	.		3	224	120	43	1	.	.	391
3.00-3.49	.	.	.		14	213	40	12	.	.	279
3.50-3.99	.	.	.			91	83	11	1	.	186
4.00-4.49	.	.	.			3	78	34	1	.	116
4.50-4.99	.	.	.				7	45	2	.	54
5.00-5.49	.	.	.					12	1	.	13
5.50-5.99	.	.	.					2	8	.	10
6.00-6.49	.	.	.						3	.	3
6.50-6.99	.	.	.						.	.	0
7.00+	.	.	.						.	.	0
TOTAL	98	1113	3848	2332	1194	815	259	117	16	0	
MEAN HS(M) = 1.2	LARGEST HS(M)= 6.4		MEAN TP(SEC)= 5.1		NO. OF CASES= 9177.						

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

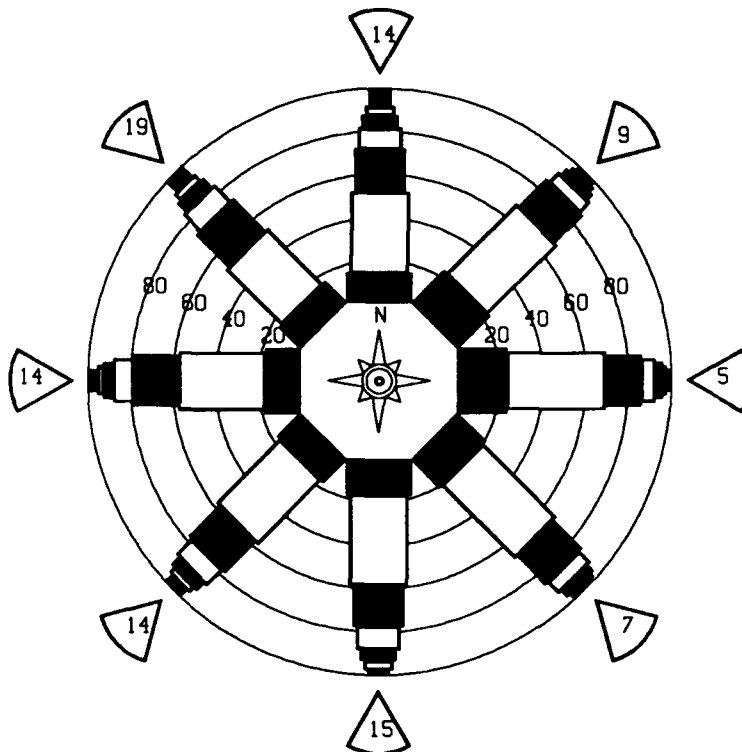
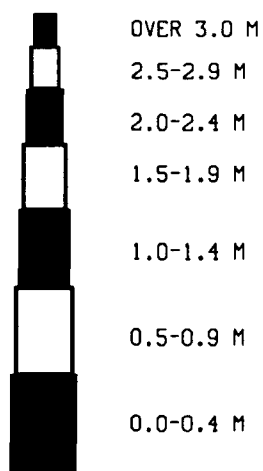
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0- 3.9	4.0- 4.9	5.0- 5.9	6.0- 6.9	7.0- 7.9	8.0- 8.9	9.0- 9.9	10.0- 10.9	11.0- LONGER	
0.00-0.49	74	578	156	4	.	.	.	.	.	.	812
0.50-0.99	.	285	1883	190	2	.	.	.	.	.	2360
1.00-1.49	.	1	499	1006	87	3	.	.	.	.	1596
1.50-1.99	.	.	45	419	345	47	.	.	.	.	856
2.00-2.49	.	.	.	189	167	160	1	.	.	.	517
2.50-2.99	.	.	.	2	268	87	12	.	.	.	369
3.00-3.49	16	222	20	1	.	.	259
3.50-3.99	110	72	6	.	.	188
4.00-4.49	6	100	20	.	.	126
4.50-4.99	18	48	.	.	66
5.00-5.49	27	5	.	32
5.50-5.99	4	.	.	9
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	74	864	2583	1810	885	635	223	106	10	0	
MEAN HS(M) = 1.4	LARGEST HS(M)= 5.9		MEAN TP(SEC)= 5.2		NO. OF CASES= 6738.						

STATION S95 47.23N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.49	179	1169	288	6	.	.	.	.	.	.	1642
0.50-0.99	.	616	3264	231	9	7	1	.	.	.	4120
1.00-1.49	.	.	791	1100	91	35	1	.	.	.	1990
1.50-1.99	.	.	45	541	315	104	2	.	.	.	937
2.00-2.49	.	.	.	178	209	75	8	.	.	.	493
2.50-2.99	.	.	.	2	242	200	10	2	.	.	327
3.00-3.49	12	93	31	7	.	.	224
3.50-3.99	8	11	16	.	.	126
4.00-4.49	54	7	.	.	69
4.50-4.99	11	3	.	.	27
5.00-5.49	9	.	.	9
5.50-5.99	3	1	.	4
6.00-6.49	0
6.50-6.99	0
7.00+	0
TOTAL	179	1785	4388	2058	878	522	118	39	1	0	

MEAN HS(M)= 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.7 TOTAL CASES= 93504.

STATION 95
47.23N, 86.43 W
93504 CASES



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION S95 (47.23N 86.43W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	1.1	1.0	0.9	0.7	0.6	0.5	0.5	0.7	1.0	1.1	1.1	0.8
1957	1.7	1.5	1.2	1.0	1.0	0.9	0.7	0.8	1.2	1.0	1.4	1.7	1.2
1958	1.1	1.7	0.7	1.0	0.8	0.6	0.6	0.6	0.8	1.1	1.8	1.1	1.1
1959	1.0	1.1	1.0	0.8	0.9	0.6	0.5	0.5	0.7	0.9	1.1	1.3	0.9
1960	1.3	1.3	1.0	0.8	0.9	0.6	0.5	0.5	0.7	1.1	1.1	1.3	1.1
1961	1.0	1.1	1.3	0.8	0.8	0.7	0.5	0.5	1.0	1.1	1.3	1.1	0.9
1962	1.5	1.1	0.7	0.8	0.7	0.5	0.5	0.6	0.8	1.1	1.3	1.1	0.9
1963	1.4	1.5	1.1	1.1	0.8	0.7	0.7	0.7	0.8	1.1	1.3	1.1	1.1
1964	1.7	1.7	1.1	1.3	1.0	0.8	0.6	0.9	1.1	1.3	1.3	1.1	1.1
1965	1.8	1.9	1.3	1.0	0.9	0.8	0.8	0.7	0.9	1.1	1.7	1.1	1.3
1966	1.6	1.8	2.1	1.1	1.1	1.2	0.8	0.7	1.1	1.1	2.0	1.1	1.4
1967	1.9	1.9	1.6	1.1	1.2	1.0	0.7	0.8	1.1	1.1	1.5	1.1	1.3
1968	1.6	2.3	1.7	1.3	1.0	0.7	0.8	0.8	0.9	1.1	1.8	1.1	1.3
1969	1.9	1.9	1.7	1.1	0.9	0.8	0.6	0.8	1.1	1.1	1.5	1.1	1.2
1970	1.6	1.9	1.3	1.1	1.4	1.1	0.7	0.7	1.1	1.1	1.7	1.1	1.3
1971	1.4	1.5	1.4	0.0	0.8	0.6	0.6	0.6	0.8	1.1	1.4	1.1	1.0
1972	1.6	1.3	1.4	0.0	0.8	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.1
1973	1.5	1.4	1.6	1.2	0.9	0.6	0.7	0.7	1.1	1.1	1.1	1.1	1.1
1974	1.3	1.1	1.4	1.1	0.8	0.7	0.6	0.7	1.1	1.1	1.3	1.1	1.1
1975	1.5	0.9	1.2	0.0	0.7	0.7	0.7	0.7	0.8	1.1	1.1	1.1	1.1
1976	1.8	1.1	2.0	0.0	0.9	0.6	0.6	0.6	0.8	1.1	1.3	1.1	1.1
1977	1.4	1.6	1.1	0.0	0.8	0.6	0.7	0.6	0.8	1.1	1.3	1.1	1.1
1978	1.7	1.1	1.1	0.0	0.8	0.6	0.7	0.7	0.9	1.1	1.3	1.1	1.1
1979	1.4	1.1	1.1	0.0	0.8	0.6	0.6	0.7	1.1	1.1	1.1	1.1	1.1
1980	1.1	1.1	1.1	0.0	0.8	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1981	1.1	1.1	1.1	0.0	0.7	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1982	1.1	1.1	1.1	0.0	0.7	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1983	1.1	1.1	1.1	0.0	0.8	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1984	1.1	1.1	1.1	0.0	0.8	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1985	1.1	1.1	1.1	0.0	0.8	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1986	1.1	1.1	1.1	0.0	0.8	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
1987	1.4	1.2	1.4	0.9	0.7	0.6	0.5	0.7	0.9	1.2	1.5	1.4	1.0
MEAN	1.5	1.4	1.4	1.0	0.8	0.7	0.6	0.7	0.9	1.2	1.5	1.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION S95 (47.23N 86.43W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.9	3.8	4.1	2.8	1.8	1.5	1.3	1.4	2.7	4.3	3.4	3.2	
1957	3.0	4.5	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1958	4.4	4.4	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1959	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1960	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1961	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1962	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1963	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1964	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1965	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1966	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1967	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1968	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1969	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1970	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1971	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1972	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1973	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1974	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1975	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1976	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1977	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1978	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1979	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1980	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1981	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1982	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1983	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1984	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1985	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1986	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	
1987	3.3	4.6	3.3	2.8	1.0	0.9	0.9	2.4	3.7	3.3	4.7	4.6	

32 YR. STATISTICS FOR WIS STATION S95

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.1
MEAN PEAK WAVE PERIOD	(SECONDS)	4.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	5.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		66112809

APPENDIX B: RETURN PERIOD TABLES

Station 1 (47.95N , 89.42W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.3(0.11)	2.7(0.06)	4.0(0.08)	5.3(0.10)
5.00	5.7(0.15)	2.9(0.09)	4.3(0.12)	5.7(0.14)
10.00	6.1(0.19)	3.1(0.11)	4.6(0.14)	6.1(0.17)
20.00	6.4(0.22)	3.3(0.12)	4.9(0.17)	6.4(0.21)
50.00	6.9(0.26)	3.6(0.15)	5.2(0.20)	6.8(0.25)

Station 2 (47.80N , 89.63W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.1(0.11)	3.7(0.08)	4.5(0.09)	5.3(0.09)
5.00	5.6(0.15)	4.1(0.11)	4.9(0.12)	5.6(0.12)
10.00	5.9(0.18)	4.3(0.14)	5.2(0.15)	5.9(0.15)
20.00	6.2(0.21)	4.6(0.16)	5.5(0.18)	6.2(0.18)
50.00	6.7(0.26)	4.9(0.20)	5.8(0.22)	6.6(0.22)

Station 3 (47.80N , 89.45W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.10)	3.7(0.08)	4.5(0.09)	5.2(0.09)
5.00	5.4(0.15)	4.0(0.11)	4.9(0.13)	5.6(0.13)
10.00	5.8(0.18)	4.3(0.14)	5.2(0.16)	5.9(0.16)
20.00	6.1(0.21)	4.5(0.16)	5.5(0.19)	6.2(0.19)
50.00	6.5(0.25)	4.9(0.20)	5.9(0.23)	6.6(0.23)

Station 4 (47.67N , 90.07W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.7(0.09)	3.3(0.07)	7.2(0.17)	7.2(0.17)
5.00	5.1(0.13)	3.6(0.10)	7.9(0.24)	7.9(0.24)
10.00	5.4(0.15)	3.9(0.12)	8.5(0.29)	8.4(0.29)
20.00	5.6(0.18)	4.1(0.14)	9.0(0.35)	9.0(0.34)
50.00	6.0(0.22)	4.4(0.17)	9.7(0.42)	9.7(0.42)

Station 5 (47.67N , 90.28W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.10)	3.3(0.07)	7.3(0.19)	7.3(0.19)
5.00	4.9(0.13)	3.6(0.10)	8.1(0.27)	8.1(0.26)
10.00	5.2(0.16)	3.8(0.12)	8.7(0.33)	8.7(0.32)
20.00	5.5(0.19)	4.1(0.15)	9.3(0.39)	9.3(0.38)
50.00	5.9(0.23)	4.4(0.18)	10.1(0.47)	10.1(0.46)

Station 6 (47.67N , 90.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.3(0.09)	3.4(0.08)	7.2(0.18)	7.2(0.17)
5.00	4.7(0.13)	3.7(0.11)	8.0(0.25)	8.0(0.24)
10.00	4.9(0.16)	4.0(0.13)	8.6(0.30)	8.5(0.30)
20.00	5.2(0.19)	4.2(0.16)	9.1(0.36)	9.1(0.35)
50.00	5.6(0.22)	4.5(0.19)	9.9(0.43)	9.8(0.42)

Station 7 (47.53N , 90.70W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.08)	3.2(0.09)	7.1(0.17)	7.1(0.17)
5.00	4.3(0.11)	3.6(0.12)	7.8(0.24)	7.8(0.23)
10.00	4.6(0.13)	3.9(0.15)	8.4(0.29)	8.3(0.28)
20.00	4.8(0.16)	4.1(0.17)	8.9(0.34)	8.9(0.33)
50.00	5.2(0.19)	4.5(0.21)	9.6(0.41)	9.6(0.40)

Station 8 (47.53N , 90.92W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.1(0.06)	3.3(0.08)	7.1(0.16)	7.1(0.16)
5.00	3.3(0.08)	3.7(0.11)	7.8(0.22)	7.8(0.22)
10.00	3.5(0.10)	4.0(0.14)	8.3(0.27)	8.3(0.27)
20.00	3.7(0.12)	4.2(0.17)	8.8(0.32)	8.8(0.32)
50.00	4.0(0.15)	4.6(0.20)	9.5(0.39)	9.5(0.39)

Station 9 (47.38N , 90.92W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.07)	3.2(0.08)	6.3(0.13)	6.3(0.13)
5.00	4.1(0.09)	3.5(0.12)	6.9(0.19)	6.9(0.18)
10.00	4.3(0.12)	3.8(0.14)	7.3(0.23)	7.3(0.22)
20.00	4.5(0.14)	4.1(0.17)	7.7(0.27)	7.7(0.27)
50.00	4.7(0.16)	4.4(0.20)	8.3(0.33)	8.2(0.32)

Station 10 (47.38N , 91.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.8(0.06)	3.1(0.09)	6.3(0.12)	6.3(0.12)
5.00	3.1(0.08)	3.5(0.12)	6.8(0.16)	6.8(0.16)
10.00	3.3(0.10)	3.8(0.15)	7.2(0.20)	7.2(0.20)
20.00	3.4(0.11)	4.1(0.18)	7.6(0.23)	7.6(0.23)
50.00	3.7(0.14)	4.5(0.22)	8.1(0.28)	8.1(0.28)

Station 11 (47.23N , 91.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.7(0.07)	3.3(0.09)	6.6(0.15)	6.6(0.14)
5.00	4.0(0.10)	3.7(0.13)	7.2(0.20)	7.2(0.20)
10.00	4.2(0.13)	4.0(0.16)	7.6(0.25)	7.6(0.25)
20.00	4.5(0.15)	4.2(0.19)	8.1(0.29)	8.1(0.29)
50.00	4.8(0.18)	4.6(0.22)	8.7(0.35)	8.6(0.35)

Station 12 (47.08N , 91.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.3(0.07)	2.6(0.09)	6.8(0.16)	6.8(0.16)
5.00	3.6(0.09)	3.0(0.12)	7.5(0.22)	7.5(0.22)
10.00	3.8(0.11)	3.3(0.15)	8.0(0.27)	8.0(0.27)
20.00	4.1(0.13)	3.5(0.17)	8.5(0.32)	8.5(0.32)
50.00	4.3(0.16)	3.9(0.21)	9.1(0.39)	9.1(0.39)

Station 13 (47.08N , 91.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.7(0.05)	2.6(0.08)	6.6(0.11)	6.6(0.11)
5.00	2.9(0.07)	2.9(0.12)	7.1(0.16)	7.1(0.16)
10.00	3.1(0.09)	3.2(0.14)	7.4(0.19)	7.4(0.19)
20.00	3.2(0.11)	3.4(0.17)	7.8(0.23)	7.8(0.23)
50.00	3.4(0.13)	3.8(0.21)	8.3(0.28)	8.3(0.28)

Station 14 (46.95N , 91.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.0(0.07)	2.2(0.05)	5.8(0.17)	5.8(0.17)
5.00	3.3(0.10)	2.4(0.07)	6.5(0.23)	6.5(0.23)
10.00	3.5(0.12)	2.6(0.09)	7.1(0.28)	7.1(0.28)
20.00	3.7(0.15)	2.8(0.11)	7.6(0.34)	7.6(0.34)
50.00	4.0(0.18)	3.0(0.13)	8.3(0.41)	8.3(0.40)

Station 15 (46.80N , 92.00W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.2(0.03)	1.6(0.04)	4.8(0.18)	4.8(0.18)
5.00	2.4(0.05)	1.8(0.05)	5.5(0.25)	5.5(0.25)
10.00	2.5(0.06)	1.9(0.06)	6.0(0.31)	6.0(0.31)
20.00	2.6(0.07)	2.0(0.07)	6.5(0.36)	6.5(0.36)
50.00	2.7(0.08)	2.1(0.09)	7.2(0.44)	7.2(0.44)

Station 16 (46.80N , 91.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.19)	2.4(0.05)	2.7(0.04)	5.0(0.18)
5.00	5.8(0.26)	2.6(0.07)	2.9(0.05)	5.8(0.26)
10.00	6.4(0.32)	2.8(0.09)	3.0(0.06)	6.4(0.31)
20.00	6.9(0.37)	2.9(0.10)	3.1(0.07)	6.9(0.37)
50.00	7.7(0.45)	3.1(0.13)	3.3(0.09)	7.7(0.45)

Station 17 (46.80N , 91.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.20)	2.7(0.04)	3.2(0.04)	5.4(0.19)
5.00	6.2(0.27)	2.8(0.06)	3.3(0.06)	6.2(0.27)
10.00	6.8(0.33)	3.0(0.07)	3.5(0.07)	6.8(0.33)
20.00	7.5(0.39)	3.1(0.08)	3.6(0.09)	7.4(0.39)
50.00	8.3(0.48)	3.3(0.10)	3.8(0.10)	8.2(0.47)

Station 18 (46.95N , 91.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.7(0.18)	3.2(0.06)	3.3(0.08)	5.7(0.18)
5.00	6.4(0.26)	3.5(0.08)	3.6(0.11)	6.4(0.25)
10.00	7.0(0.31)	3.7(0.10)	3.9(0.13)	7.0(0.31)
20.00	7.6(0.37)	3.9(0.12)	4.1(0.15)	7.6(0.36)
50.00	8.3(0.44)	4.1(0.14)	4.4(0.18)	8.3(0.44)

Station 19 (46.95N , 91.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.1(0.16)	3.2(0.06)	3.3(0.06)	5.2(0.16)
5.00	5.8(0.23)	3.5(0.09)	3.6(0.08)	5.8(0.22)
10.00	6.3(0.28)	3.7(0.11)	3.8(0.09)	6.3(0.27)
20.00	6.8(0.33)	3.8(0.13)	3.9(0.11)	6.8(0.32)
50.00	7.5(0.40)	4.1(0.16)	4.1(0.13)	7.5(0.38)

Station 20 (47.08N , 90.92W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.1(0.12)	3.8(0.10)	3.7(0.06)	6.1(0.12)
5.00	6.6(0.17)	4.3(0.15)	4.0(0.09)	6.6(0.17)
10.00	6.9(0.21)	4.6(0.18)	4.2(0.11)	6.9(0.20)
20.00	7.3(0.24)	4.9(0.21)	4.4(0.13)	7.3(0.24)
50.00	7.8(0.29)	5.4(0.25)	4.6(0.15)	7.8(0.29)

Station 21 (47.08N , 90.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.6(0.09)	5.5(0.11)	4.3(0.06)	5.6(0.10)
5.00	5.0(0.12)	5.9(0.15)	4.6(0.09)	6.0(0.13)
10.00	5.3(0.15)	6.3(0.19)	4.8(0.11)	6.3(0.16)
20.00	5.6(0.18)	6.6(0.22)	5.0(0.13)	6.6(0.19)
50.00	5.9(0.22)	7.1(0.27)	5.2(0.15)	7.0(0.23)

Station 22 (46.95N , 90.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.10)	5.3(0.11)	4.1(0.06)	5.4(0.10)
5.00	4.9(0.13)	5.8(0.16)	4.3(0.09)	5.8(0.14)
10.00	5.2(0.16)	6.1(0.19)	4.5(0.11)	6.2(0.17)
20.00	5.5(0.19)	6.5(0.22)	4.7(0.13)	6.5(0.20)
50.00	5.9(0.23)	6.9(0.27)	5.0(0.15)	6.9(0.24)

Station 23 (46.80N , 90.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.9(0.09)	5.0(0.11)	4.1(0.08)	5.1(0.10)
5.00	4.3(0.13)	5.5(0.15)	4.4(0.10)	5.5(0.14)
10.00	4.6(0.16)	5.8(0.19)	4.6(0.13)	5.8(0.17)
20.00	4.8(0.19)	6.2(0.22)	4.8(0.15)	6.2(0.20)
50.00	5.2(0.23)	6.6(0.26)	5.1(0.18)	6.6(0.24)

Station 24 (46.65N , 90.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.11)	3.8(0.06)	2.0(0.04)	5.0(0.10)
5.00	5.4(0.15)	4.1(0.08)	2.2(0.05)	5.4(0.14)
10.00	5.8(0.18)	4.3(0.10)	2.3(0.07)	5.7(0.17)
20.00	6.1(0.22)	4.4(0.12)	2.4(0.08)	6.0(0.21)
50.00	6.5(0.26)	4.7(0.15)	2.6(0.09)	6.5(0.25)

Station 25 (46.65N , 90.28W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.7(0.13)	4.2(0.06)	3.0(0.04)	4.9(0.10)
5.00	5.3(0.18)	4.5(0.09)	3.1(0.06)	5.3(0.14)
10.00	5.7(0.22)	4.7(0.11)	3.3(0.07)	5.6(0.17)
20.00	6.1(0.26)	4.9(0.13)	3.4(0.08)	5.9(0.20)
50.00	6.6(0.31)	5.1(0.15)	3.6(0.10)	6.3(0.24)

Station 26 (46.80N , 90.07W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.11)	4.2(0.05)	2.9(0.05)	5.1(0.10)
5.00	5.5(0.15)	4.4(0.07)	3.1(0.06)	5.5(0.14)
10.00	5.9(0.19)	4.5(0.08)	3.3(0.08)	5.8(0.17)
20.00	6.2(0.22)	4.7(0.10)	3.4(0.09)	6.2(0.20)
50.00	6.7(0.27)	4.9(0.12)	3.6(0.11)	6.6(0.24)

Station 27 (46.95N , 89.45W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.12)	4.5(0.07)	4.3(0.06)	5.5(0.11)
5.00	5.9(0.17)	4.8(0.10)	4.6(0.08)	6.0(0.15)
10.00	6.3(0.21)	5.1(0.12)	4.8(0.10)	6.3(0.18)
20.00	6.7(0.25)	5.3(0.14)	4.9(0.12)	6.6(0.21)
50.00	7.2(0.30)	5.6(0.17)	5.2(0.14)	7.1(0.26)

Station 28 (46.95N , 89.63W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.12)	4.7(0.07)	4.7(0.07)	5.6(0.10)
5.00	5.9(0.17)	5.0(0.10)	5.0(0.10)	6.0(0.14)
10.00	6.3(0.20)	5.2(0.12)	5.2(0.12)	6.3(0.17)
20.00	6.6(0.24)	5.4(0.14)	5.4(0.15)	6.6(0.20)
50.00	7.1(0.29)	5.7(0.17)	5.7(0.17)	7.0(0.24)

Station 29 (46.95N , 89.42W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.12)	5.1(0.07)	4.7(0.08)	5.8(0.09)
5.00	5.9(0.17)	5.4(0.10)	5.1(0.12)	6.2(0.13)
10.00	6.3(0.21)	5.6(0.12)	5.3(0.14)	6.5(0.16)
20.00	6.7(0.25)	5.8(0.14)	5.6(0.17)	6.8(0.19)
50.00	7.2(0.30)	6.1(0.17)	5.9(0.21)	7.2(0.23)

Station 30 (47.08N , 89.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.5(0.12)	4.8(0.07)	5.7(0.10)	6.1(0.10)
5.00	6.0(0.17)	5.1(0.10)	6.1(0.13)	6.5(0.14)
10.00	6.4(0.20)	5.4(0.12)	6.4(0.16)	6.8(0.17)
20.00	6.8(0.24)	5.6(0.14)	6.7(0.19)	7.1(0.20)
50.00	7.3(0.29)	5.9(0.17)	7.1(0.23)	7.5(0.24)

Station 31 (47.08N , 89.00W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.2(0.11)	5.4(0.08)	5.7(0.11)	6.2(0.10)
5.00	5.7(0.15)	5.7(0.11)	6.1(0.15)	6.6(0.15)
10.00	6.1(0.19)	6.0(0.13)	6.5(0.18)	6.9(0.18)
20.00	6.4(0.22)	6.2(0.16)	6.8(0.21)	7.2(0.21)
50.00	6.8(0.27)	6.6(0.19)	7.2(0.26)	7.7(0.25)

Station 32 (47.23N , 88.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.2(0.11)	5.6(0.09)	5.8(0.10)	6.3(0.10)
5.00	5.6(0.15)	6.0(0.13)	6.2(0.14)	6.7(0.14)
10.00	6.0(0.18)	6.3(0.16)	6.5(0.17)	7.0(0.17)
20.00	6.3(0.22)	6.5(0.19)	6.8(0.20)	7.3(0.20)
50.00	6.8(0.26)	7.0(0.22)	7.2(0.24)	7.7(0.24)

Station 33 (47.38N , 88.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.1(0.11)	5.5(0.11)	6.2(0.11)	6.5(0.11)
5.00	5.6(0.15)	6.0(0.16)	6.6(0.15)	6.9(0.15)
10.00	5.9(0.18)	6.3(0.19)	6.9(0.18)	7.2(0.18)
20.00	6.3(0.22)	6.7(0.23)	7.3(0.21)	7.6(0.21)
50.00	6.7(0.26)	7.2(0.27)	7.7(0.26)	8.0(0.26)

Station 34 (47.53N , 88.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.0(0.12)	4.2(0.07)	6.4(0.12)	6.8(0.12)
5.00	6.5(0.17)	4.4(0.09)	6.9(0.16)	7.3(0.16)
10.00	6.9(0.20)	4.7(0.11)	7.3(0.20)	7.6(0.20)
20.00	7.3(0.24)	4.9(0.13)	7.7(0.23)	8.0(0.23)
50.00	7.8(0.29)	5.1(0.16)	8.1(0.28)	8.5(0.28)

Station 35 (47.53N , 88.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.6(0.10)	4.8(0.07)	6.3(0.11)	6.6(0.11)
5.00	6.0(0.14)	5.1(0.10)	6.8(0.15)	7.0(0.15)
10.00	6.3(0.17)	5.4(0.13)	7.1(0.18)	7.4(0.18)
20.00	6.6(0.20)	5.6(0.15)	7.4(0.21)	7.7(0.22)
50.00	7.1(0.24)	5.9(0.18)	7.8(0.26)	8.1(0.26)

Station 36 (47.53N , 87.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.3(0.10)	4.9(0.07)	6.3(0.11)	6.4(0.10)
5.00	5.8(0.14)	5.3(0.10)	6.7(0.15)	6.8(0.14)
10.00	6.1(0.17)	5.5(0.12)	7.0(0.18)	7.1(0.17)
20.00	6.4(0.21)	5.7(0.14)	7.4(0.21)	7.4(0.20)
50.00	6.8(0.25)	6.0(0.17)	7.8(0.26)	7.9(0.25)

Station 37 (47.53N , 87.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.9(0.10)	4.8(0.07)	6.2(0.10)	6.2(0.10)
5.00	5.4(0.13)	5.1(0.09)	6.6(0.14)	6.6(0.14)
10.00	5.7(0.16)	5.3(0.11)	6.9(0.17)	6.9(0.17)
20.00	6.0(0.19)	5.5(0.14)	7.2(0.21)	7.2(0.20)
50.00	6.4(0.23)	5.8(0.16)	7.6(0.25)	7.6(0.24)

Station 38 (47.53N , 87.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.7(0.07)	4.5(0.08)	6.2(0.10)	6.2(0.10)
5.00	5.0(0.10)	4.8(0.11)	6.6(0.14)	6.6(0.13)
10.00	5.2(0.12)	5.1(0.13)	6.9(0.17)	6.9(0.16)
20.00	5.4(0.14)	5.3(0.16)	7.2(0.20)	7.2(0.19)
50.00	5.7(0.17)	5.6(0.19)	7.6(0.24)	7.5(0.23)

Station 39 (47.35N , 87.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.6(0.07)	5.4(0.08)	4.9(0.06)	5.5(0.07)
5.00	4.9(0.09)	5.7(0.11)	5.1(0.08)	5.8(0.10)
10.00	5.1(0.11)	5.9(0.13)	5.3(0.10)	6.0(0.12)
20.00	5.3(0.13)	6.2(0.15)	5.5(0.11)	6.2(0.14)
50.00	5.6(0.16)	6.5(0.18)	5.7(0.14)	6.5(0.17)

Station 40 (47.38N , 87.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.06)	3.7(0.05)	5.4(0.10)	5.4(0.10)
5.00	3.6(0.08)	4.0(0.07)	5.9(0.14)	5.9(0.14)
10.00	3.8(0.09)	4.1(0.09)	6.2(0.17)	6.2(0.17)
20.00	4.0(0.11)	4.3(0.10)	6.6(0.21)	6.5(0.20)
50.00	4.2(0.14)	4.5(0.13)	7.0(0.25)	7.0(0.25)

Station 41 (47.23N , 87.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.05)	4.1(0.09)	5.5(0.12)	5.6(0.12)
5.00	3.7(0.07)	4.4(0.12)	6.0(0.17)	6.1(0.17)
10.00	3.8(0.09)	4.7(0.15)	6.4(0.21)	6.5(0.21)
20.00	4.0(0.11)	5.0(0.17)	6.8(0.25)	6.9(0.25)
50.00	4.1(0.13)	5.3(0.21)	7.3(0.30)	7.4(0.30)

Station 42 (47.08N , 88.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.9(0.05)	4.8(0.16)	5.6(0.13)	5.8(0.13)
5.00	3.1(0.07)	5.5(0.22)	6.2(0.18)	6.4(0.18)
10.00	3.3(0.09)	6.0(0.27)	6.6(0.22)	6.8(0.22)
20.00	3.4(0.10)	6.5(0.32)	7.0(0.27)	7.2(0.26)
50.00	3.6(0.12)	7.1(0.39)	7.6(0.32)	7.8(0.32)

Station 43 (46.95N , 88.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.3(0.04)	1.8(0.03)	3.2(0.07)	3.2(0.07)
5.00	2.5(0.05)	1.9(0.04)	3.5(0.10)	3.5(0.09)
10.00	2.6(0.07)	2.0(0.05)	3.7(0.12)	3.7(0.12)
20.00	2.7(0.08)	2.1(0.06)	3.9(0.14)	3.9(0.14)
50.00	2.9(0.09)	2.2(0.08)	4.2(0.17)	4.2(0.17)

Station 44 (46.95N , 87.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.8(0.13)	5.2(0.12)	3.2(0.06)	6.0(0.11)
5.00	6.4(0.18)	5.7(0.16)	3.4(0.08)	6.5(0.15)
10.00	6.8(0.22)	6.1(0.20)	3.6(0.09)	6.8(0.19)
20.00	7.2(0.25)	6.4(0.23)	3.8(0.11)	7.2(0.22)
50.00	7.7(0.31)	6.9(0.28)	4.0(0.13)	7.7(0.27)

Station 45 (46.95N , 87.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.6(0.12)	5.6(0.11)	3.6(0.05)	6.0(0.10)
5.00	6.1(0.16)	6.0(0.15)	3.8(0.07)	6.5(0.14)
10.00	6.5(0.20)	6.3(0.18)	4.0(0.09)	6.8(0.17)
20.00	6.9(0.24)	6.7(0.21)	4.2(0.11)	7.1(0.20)
50.00	7.3(0.28)	7.1(0.26)	4.4(0.13)	7.5(0.24)

Station 46 (46.80N , 87.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.3(0.12)	5.7(0.11)	7.5(0.12)	7.5(0.11)
5.00	4.8(0.17)	6.1(0.15)	7.9(0.16)	7.9(0.16)
10.00	5.2(0.20)	6.4(0.18)	8.3(0.20)	8.3(0.19)
20.00	5.6(0.24)	6.8(0.21)	8.7(0.23)	8.6(0.23)
50.00	6.1(0.29)	7.2(0.26)	9.1(0.28)	9.1(0.27)

Station 47 (46.65N , 87.28W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.06)	6.6(0.13)	8.3(0.14)	8.3(0.14)
5.00	3.7(0.09)	7.2(0.18)	8.9(0.20)	8.9(0.19)
10.00	3.9(0.11)	7.6(0.22)	9.3(0.25)	9.3(0.24)
20.00	4.1(0.13)	7.9(0.26)	9.8(0.29)	9.8(0.28)
50.00	4.4(0.15)	8.5(0.31)	10.4(0.35)	10.3(0.34)

Station 48 (46.65N , 87.07W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.8(0.11)	8.5(0.15)	5.1(0.08)	8.5(0.15)
5.00	6.3(0.15)	9.2(0.22)	5.4(0.12)	9.2(0.21)
10.00	6.7(0.19)	9.7(0.26)	5.7(0.14)	9.7(0.26)
20.00	7.0(0.22)	10.2(0.31)	5.9(0.17)	10.2(0.31)
50.00	7.5(0.27)	10.8(0.38)	6.3(0.20)	10.8(0.37)

Station 49 (46.65N , 86.85W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.1(0.09)	8.4(0.15)	5.4(0.08)	8.4(0.15)
5.00	5.5(0.12)	9.0(0.21)	5.8(0.11)	9.0(0.21)
10.00	5.8(0.15)	9.5(0.26)	6.1(0.14)	9.5(0.26)
20.00	6.1(0.18)	10.0(0.31)	6.3(0.16)	10.0(0.31)
50.00	6.4(0.22)	10.6(0.37)	6.6(0.20)	10.6(0.37)

Station 50 (46.65N , 86.65W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	8.1(0.15)	6.7(0.09)	4.2(0.07)	8.1(0.15)
5.00	8.7(0.21)	7.1(0.12)	4.5(0.10)	8.8(0.21)
10.00	9.2(0.26)	7.4(0.15)	4.7(0.12)	9.2(0.25)
20.00	9.7(0.31)	7.7(0.18)	4.9(0.14)	9.7(0.30)
50.00	10.3(0.37)	8.1(0.22)	5.2(0.17)	10.3(0.36)

Station 51 (46.65N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	7.7(0.15)	7.0(0.09)	4.3(0.07)	7.9(0.13)
5.00	8.4(0.21)	7.4(0.13)	4.7(0.10)	8.5(0.19)
10.00	8.9(0.26)	7.7(0.15)	4.9(0.12)	8.9(0.23)
20.00	9.3(0.31)	7.9(0.18)	5.1(0.14)	9.3(0.27)
50.00	10.0(0.37)	8.3(0.22)	5.4(0.17)	9.9(0.33)

Station 52 (46.80N , 86.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.1(0.08)	6.8(0.11)	5.4(0.08)	6.9(0.10)
5.00	5.5(0.11)	7.3(0.15)	5.8(0.11)	7.3(0.14)
10.00	5.7(0.13)	7.6(0.18)	6.0(0.14)	7.6(0.18)
20.00	6.0(0.16)	8.0(0.21)	6.3(0.16)	8.0(0.21)
50.00	6.3(0.19)	8.4(0.26)	6.6(0.19)	8.4(0.25)

Station 53 (46.80N , 86.00W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.06)	6.3(0.07)	6.0(0.10)	6.5(0.08)
5.00	4.7(0.08)	6.6(0.10)	6.5(0.14)	6.9(0.11)
10.00	4.9(0.10)	6.8(0.13)	6.8(0.17)	7.1(0.14)
20.00	5.1(0.12)	7.1(0.15)	7.1(0.20)	7.4(0.16)
50.00	5.4(0.15)	7.4(0.18)	7.5(0.24)	7.7(0.20)

Station 54 (46.80N , 85.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.05)	5.4(0.07)	6.5(0.09)	6.5(0.09)
5.00	4.4(0.08)	5.7(0.10)	6.9(0.13)	6.9(0.12)
10.00	4.5(0.09)	5.9(0.12)	7.2(0.16)	7.2(0.15)
20.00	4.7(0.11)	6.1(0.14)	7.5(0.18)	7.4(0.18)
50.00	4.9(0.13)	6.4(0.17)	7.8(0.22)	7.8(0.22)

Station 55 (46.80N , 85.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.06)	5.5(0.08)	6.6(0.09)	6.7(0.09)
5.00	4.2(0.08)	5.8(0.11)	7.0(0.12)	7.1(0.12)
10.00	4.4(0.10)	6.1(0.14)	7.3(0.15)	7.3(0.15)
20.00	4.6(0.12)	6.3(0.17)	7.6(0.18)	7.6(0.18)
50.00	4.8(0.14)	6.7(0.20)	8.0(0.22)	8.0(0.21)

Station 56 (46.80N , 85.37W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.3(0.07)	6.7(0.10)	6.4(0.10)	6.9(0.09)
5.00	4.6(0.10)	7.1(0.14)	6.9(0.14)	7.3(0.13)
10.00	4.8(0.12)	7.4(0.17)	7.2(0.17)	7.7(0.16)
20.00	5.1(0.14)	7.7(0.20)	7.5(0.21)	7.9(0.19)
50.00	5.4(0.17)	8.1(0.24)	7.9(0.25)	8.3(0.23)

Station 57 (46.80N , 85.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.7(0.05)	5.3(0.08)	7.2(0.09)	7.2(0.09)
5.00	3.9(0.07)	5.6(0.12)	7.6(0.13)	7.6(0.13)
10.00	4.0(0.08)	5.9(0.14)	7.9(0.16)	7.9(0.16)
20.00	4.2(0.10)	6.1(0.17)	8.2(0.19)	8.2(0.19)
50.00	4.4(0.12)	6.5(0.20)	8.6(0.23)	8.6(0.23)

Station 58 (46.80N , 84.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.0(0.05)	2.6(0.04)	7.1(0.09)	7.1(0.09)
5.00	3.2(0.07)	2.8(0.06)	7.5(0.13)	7.5(0.13)
10.00	3.3(0.08)	2.9(0.07)	7.8(0.16)	7.8(0.16)
20.00	3.5(0.10)	3.1(0.09)	8.1(0.19)	8.1(0.19)
50.00	3.7(0.12)	3.2(0.10)	8.4(0.22)	8.4(0.22)

Station 59 (46.63N , 84.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.0(0.05)	3.1(0.05)	3.2(0.05)	3.4(0.05)
5.00	3.2(0.07)	3.3(0.07)	3.4(0.07)	3.6(0.06)
10.00	3.4(0.08)	3.4(0.08)	3.5(0.08)	3.7(0.08)
20.00	3.5(0.10)	3.6(0.10)	3.7(0.09)	3.9(0.09)
50.00	3.7(0.12)	3.8(0.12)	3.8(0.11)	4.1(0.11)

Station 60 (46.48N , 84.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.9(0.04)	4.6(0.08)	3.8(0.07)	4.7(0.07)
5.00	3.1(0.05)	4.9(0.11)	4.1(0.10)	5.0(0.10)
10.00	3.2(0.06)	5.2(0.13)	4.3(0.12)	5.2(0.12)
20.00	3.3(0.07)	5.4(0.15)	4.5(0.14)	5.4(0.15)
50.00	3.4(0.09)	5.7(0.18)	4.8(0.17)	5.7(0.18)

Station 61 (46.63N , 84.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.08)	4.0(0.05)	3.3(0.06)	4.4(0.07)
5.00	4.5(0.12)	4.3(0.07)	3.6(0.08)	4.6(0.09)
10.00	4.8(0.14)	4.4(0.09)	3.8(0.10)	4.8(0.11)
20.00	5.0(0.17)	4.6(0.11)	4.0(0.12)	5.1(0.13)
50.00	5.3(0.20)	4.8(0.13)	4.2(0.14)	5.3(0.16)

Station 62 (46.80N , 84.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.9(0.11)	7.4(0.11)	3.5(0.06)	7.4(0.10)
5.00	6.4(0.15)	7.9(0.15)	3.8(0.09)	7.9(0.14)
10.00	6.7(0.18)	8.3(0.18)	4.0(0.11)	8.2(0.17)
20.00	7.0(0.21)	8.6(0.22)	4.2(0.13)	8.5(0.21)
50.00	7.5(0.26)	9.1(0.26)	4.4(0.16)	9.0(0.25)

Station 63 (46.95N , 84.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.6(0.10)	7.1(0.12)	3.1(0.06)	7.3(0.10)
5.00	7.0(0.14)	7.6(0.17)	3.3(0.08)	7.7(0.14)
10.00	7.3(0.17)	8.0(0.20)	3.5(0.10)	8.0(0.17)
20.00	7.6(0.20)	8.3(0.24)	3.7(0.12)	8.3(0.20)
50.00	8.1(0.24)	8.8(0.29)	3.9(0.14)	8.8(0.24)

Station 64 (47.08N , 84.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.5(0.09)	6.7(0.09)	4.2(0.07)	6.7(0.08)
5.00	5.9(0.13)	7.1(0.12)	4.5(0.10)	7.1(0.12)
10.00	6.2(0.15)	7.3(0.15)	4.7(0.12)	7.3(0.14)
20.00	6.5(0.18)	7.6(0.18)	4.9(0.14)	7.6(0.17)
50.00	6.9(0.22)	8.0(0.22)	5.2(0.17)	7.9(0.20)

Station 65 (47.23N , 84.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.4(0.03)	5.0(0.07)	6.3(0.09)	6.3(0.09)
5.00	2.5(0.04)	5.3(0.10)	6.7(0.13)	6.7(0.12)
10.00	2.6(0.05)	5.5(0.12)	7.0(0.15)	7.0(0.15)
20.00	2.7(0.06)	5.8(0.15)	7.3(0.18)	7.3(0.18)
50.00	2.8(0.07)	6.1(0.18)	7.7(0.22)	7.7(0.22)

Station 66 (47.38N , 84.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.3(0.09)	4.7(0.08)	3.5(0.06)	5.4(0.08)
5.00	5.7(0.12)	5.1(0.11)	3.8(0.09)	5.8(0.11)
10.00	5.9(0.15)	5.3(0.13)	4.0(0.11)	6.0(0.14)
20.00	6.2(0.18)	5.5(0.15)	4.2(0.12)	6.3(0.16)
50.00	6.6(0.21)	5.8(0.18)	4.4(0.15)	6.6(0.20)

Station 67 (47.53N , 85.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.9(0.10)	5.1(0.09)	3.4(0.05)	6.0(0.10)
5.00	6.4(0.14)	5.5(0.12)	3.6(0.07)	6.4(0.14)
10.00	6.7(0.17)	5.8(0.15)	3.7(0.08)	6.8(0.17)
20.00	7.0(0.21)	6.1(0.18)	3.9(0.10)	7.1(0.20)
50.00	7.4(0.25)	6.4(0.22)	4.1(0.12)	7.5(0.24)

Station 68 (47.67N , 85.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.0(0.05)	5.7(0.11)	5.5(0.09)	6.0(0.10)
5.00	3.2(0.06)	6.2(0.16)	5.9(0.13)	6.4(0.14)
10.00	3.4(0.08)	6.6(0.19)	6.2(0.15)	6.7(0.17)
20.00	3.5(0.09)	6.9(0.23)	6.4(0.18)	7.0(0.20)
50.00	3.7(0.11)	7.4(0.28)	6.8(0.22)	7.4(0.24)

Station 69 (47.80N , 85.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.8(0.04)	4.9(0.12)	5.3(0.08)	5.7(0.10)
5.00	2.9(0.06)	5.5(0.17)	5.7(0.12)	6.1(0.14)
10.00	3.1(0.08)	5.8(0.21)	6.0(0.14)	6.4(0.17)
20.00	3.2(0.09)	6.2(0.24)	6.2(0.17)	6.7(0.20)
50.00	3.4(0.11)	6.7(0.29)	6.6(0.20)	7.1(0.25)

Station 70 (47.95N , 85.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.12)	4.8(0.10)	2.1(0.03)	5.6(0.11)
5.00	5.9(0.16)	5.2(0.13)	2.3(0.04)	6.1(0.15)
10.00	6.2(0.20)	5.5(0.16)	2.3(0.05)	6.4(0.19)
20.00	6.6(0.23)	5.8(0.19)	2.4(0.06)	6.8(0.22)
50.00	7.1(0.28)	6.2(0.23)	2.5(0.07)	7.2(0.27)

Station 71 (47.80N , 85.37W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.8(0.11)	3.7(0.06)	2.7(0.04)	5.8(0.11)
5.00	6.2(0.15)	3.9(0.08)	2.9(0.06)	6.2(0.15)
10.00	6.5(0.18)	4.1(0.10)	3.0(0.07)	6.5(0.18)
20.00	6.9(0.21)	4.3(0.12)	3.1(0.08)	6.9(0.21)
50.00	7.3(0.26)	4.5(0.14)	3.3(0.10)	7.3(0.26)

Station 72 (47.80N , 85.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.7(0.10)	4.5(0.08)	3.2(0.06)	5.7(0.09)
5.00	6.1(0.13)	4.9(0.12)	3.5(0.08)	6.1(0.13)
10.00	6.4(0.16)	5.1(0.14)	3.7(0.10)	6.4(0.16)
20.00	6.7(0.19)	5.4(0.17)	3.8(0.12)	6.7(0.19)
50.00	7.1(0.23)	5.7(0.20)	4.1(0.14)	7.1(0.23)

Station 73 (47.80N , 85.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.6(0.10)	5.0(0.07)	3.5(0.05)	5.7(0.09)
5.00	6.1(0.14)	5.3(0.10)	3.7(0.07)	6.1(0.13)
10.00	6.4(0.17)	5.5(0.12)	3.9(0.08)	6.4(0.16)
20.00	6.7(0.20)	5.7(0.14)	4.0(0.09)	6.7(0.18)
50.00	7.1(0.25)	6.0(0.17)	4.2(0.11)	7.1(0.22)

Station 74 (47.95N , 86.00W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.10)	5.4(0.08)	3.9(0.05)	5.7(0.09)
5.00	5.8(0.14)	5.8(0.12)	4.2(0.07)	6.1(0.12)
10.00	6.1(0.17)	6.0(0.14)	4.3(0.09)	6.4(0.15)
20.00	6.4(0.20)	6.3(0.17)	4.5(0.11)	6.6(0.18)
50.00	6.8(0.24)	6.6(0.21)	4.7(0.13)	7.0(0.21)

Station 75 (48.08N , 86.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.8(0.09)	5.7(0.09)	4.8(0.06)	5.8(0.09)
5.00	5.1(0.12)	6.1(0.13)	5.1(0.08)	6.2(0.13)
10.00	5.4(0.15)	6.4(0.16)	5.3(0.10)	6.5(0.15)
20.00	5.6(0.18)	6.7(0.19)	5.5(0.12)	6.8(0.18)
50.00	6.0(0.21)	7.0(0.22)	5.7(0.14)	7.2(0.22)

Station 76 (48.23N , 86.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.6(0.11)	5.7(0.10)	5.1(0.07)	5.9(0.09)
5.00	5.0(0.15)	6.2(0.14)	5.4(0.09)	6.3(0.13)
10.00	5.3(0.18)	6.5(0.17)	5.6(0.11)	6.6(0.15)
20.00	5.6(0.21)	6.8(0.20)	5.8(0.13)	6.9(0.18)
50.00	6.0(0.26)	7.2(0.24)	6.1(0.16)	7.3(0.22)

Station 77 (48.38N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.3(0.11)	5.8(0.09)	5.5(0.08)	6.1(0.08)
5.00	4.8(0.15)	6.2(0.12)	5.9(0.12)	6.4(0.12)
10.00	5.1(0.18)	6.5(0.15)	6.2(0.14)	6.7(0.14)
20.00	5.4(0.21)	6.8(0.18)	6.4(0.17)	7.0(0.17)
50.00	5.8(0.26)	7.1(0.22)	6.8(0.20)	7.3(0.20)

Station 78 (48.52N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.8(0.12)	6.1(0.10)	5.7(0.10)	6.4(0.09)
5.00	5.3(0.17)	6.5(0.14)	6.1(0.13)	6.8(0.13)
10.00	5.7(0.21)	6.9(0.17)	6.4(0.16)	7.1(0.15)
20.00	6.0(0.24)	7.2(0.20)	6.7(0.19)	7.3(0.18)
50.00	6.5(0.29)	7.6(0.24)	7.1(0.23)	7.7(0.22)

Station 79 (48.67N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.11)	6.4(0.11)	6.0(0.11)	6.6(0.09)
5.00	4.3(0.16)	6.9(0.15)	6.4(0.15)	7.0(0.13)
10.00	4.7(0.20)	7.2(0.18)	6.8(0.19)	7.3(0.16)
20.00	5.0(0.23)	7.5(0.21)	7.2(0.22)	7.6(0.18)
50.00	5.5(0.28)	8.0(0.26)	7.6(0.27)	8.0(0.22)

Station 80 (48.67N , 86.65W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.5(0.11)	6.4(0.11)	2.6(0.05)	6.9(0.09)
5.00	7.0(0.16)	6.9(0.16)	2.9(0.07)	7.3(0.13)
10.00	7.4(0.19)	7.3(0.19)	3.0(0.09)	7.5(0.15)
20.00	7.7(0.23)	7.6(0.23)	3.2(0.11)	7.8(0.18)
50.00	8.2(0.27)	8.1(0.27)	3.4(0.13)	8.2(0.22)

Station 81 (48.67N , 86.85W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.7(0.12)	7.0(0.13)	2.8(0.06)	7.3(0.11)
5.00	7.2(0.17)	7.5(0.18)	3.1(0.09)	7.8(0.15)
10.00	7.6(0.20)	8.0(0.22)	3.3(0.11)	8.1(0.19)
20.00	8.0(0.24)	8.4(0.26)	3.4(0.13)	8.5(0.22)
50.00	8.5(0.29)	8.9(0.32)	3.7(0.15)	8.9(0.26)

Station 82 (48.67N , 87.28W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.4(0.15)	7.4(0.13)	6.2(0.14)	7.6(0.11)
5.00	7.1(0.21)	7.9(0.18)	6.8(0.19)	8.1(0.15)
10.00	7.5(0.25)	8.4(0.22)	7.3(0.24)	8.4(0.18)
20.00	8.0(0.30)	8.8(0.27)	7.7(0.28)	8.8(0.21)
50.00	8.6(0.36)	9.3(0.32)	8.3(0.34)	9.2(0.26)

Station 83 (48.67N , 87.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.3(0.15)	7.5(0.12)	5.1(0.14)	7.6(0.10)
5.00	6.9(0.21)	8.0(0.16)	5.7(0.20)	8.0(0.15)
10.00	7.4(0.26)	8.4(0.20)	6.2(0.25)	8.4(0.18)
20.00	7.9(0.30)	8.7(0.23)	6.7(0.29)	8.7(0.21)
50.00	8.5(0.36)	9.2(0.28)	7.2(0.35)	9.1(0.25)

Station 84 (48.67N , 87.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.6(0.09)	6.6(0.13)	6.8(0.13)	7.2(0.11)
5.00	5.0(0.12)	7.2(0.18)	7.4(0.19)	7.6(0.15)
10.00	5.2(0.15)	7.6(0.22)	7.8(0.23)	8.0(0.18)
20.00	5.5(0.17)	8.0(0.26)	8.2(0.27)	8.3(0.22)
50.00	5.9(0.21)	8.5(0.31)	8.8(0.33)	8.8(0.26)

Station 85 (48.67N , 87.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.11)	7.0(0.14)	4.1(0.09)	7.0(0.13)
5.00	5.9(0.15)	7.6(0.20)	4.4(0.12)	7.6(0.18)
10.00	6.2(0.19)	8.0(0.24)	4.7(0.15)	8.0(0.22)
20.00	6.6(0.22)	8.5(0.29)	5.0(0.17)	8.4(0.26)
50.00	7.0(0.27)	9.1(0.34)	5.3(0.21)	8.9(0.32)

Station 86 (48.52N , 88.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.09)	5.7(0.11)	4.8(0.09)	5.8(0.10)
5.00	4.8(0.12)	6.2(0.15)	5.2(0.13)	6.3(0.13)
10.00	5.1(0.15)	6.6(0.19)	5.4(0.16)	6.6(0.16)
20.00	5.4(0.18)	6.9(0.22)	5.7(0.18)	6.9(0.19)
50.00	5.7(0.22)	7.4(0.26)	6.1(0.22)	7.3(0.23)

Station 87 (48.38N , 88.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.09)	5.3(0.09)	5.1(0.11)	5.6(0.09)
5.00	4.4(0.12)	5.6(0.12)	5.6(0.15)	6.0(0.12)
10.00	4.7(0.15)	5.9(0.15)	5.9(0.18)	6.3(0.15)
20.00	4.9(0.17)	6.2(0.18)	6.3(0.22)	6.5(0.17)
50.00	5.3(0.21)	6.6(0.21)	6.7(0.26)	6.9(0.21)

Station 88 (48.23N , 88.57W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.07)	3.7(0.11)	4.8(0.10)	5.0(0.08)
5.00	4.7(0.09)	4.2(0.15)	5.2(0.14)	5.3(0.11)
10.00	4.9(0.11)	4.5(0.18)	5.5(0.17)	5.6(0.14)
20.00	5.1(0.14)	4.8(0.22)	5.8(0.20)	5.9(0.16)
50.00	5.4(0.16)	5.3(0.26)	6.2(0.24)	6.2(0.20)

Station 89 (48.23N , 88.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.06)	2.8(0.08)	4.1(0.07)	4.3(0.06)
5.00	4.4(0.09)	3.1(0.11)	4.4(0.10)	4.6(0.09)
10.00	4.6(0.11)	3.3(0.14)	4.7(0.12)	4.8(0.11)
20.00	4.8(0.13)	3.6(0.16)	4.9(0.15)	5.0(0.12)
50.00	5.0(0.16)	3.9(0.20)	5.2(0.18)	5.3(0.15)

Station 90 (48.08N , 89.00W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.06)	1.9(0.04)	3.9(0.08)	4.1(0.06)
5.00	4.0(0.08)	2.1(0.06)	4.2(0.11)	4.4(0.09)
10.00	4.2(0.10)	2.2(0.07)	4.5(0.14)	4.6(0.11)
20.00	4.4(0.12)	2.4(0.09)	4.7(0.16)	4.8(0.13)
50.00	4.7(0.15)	2.5(0.10)	5.1(0.19)	5.1(0.16)

Station 91 (48.08N , 89.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.10)	2.4(0.04)	4.2(0.09)	4.6(0.08)
5.00	4.8(0.14)	2.6(0.06)	4.6(0.12)	4.9(0.11)
10.00	5.1(0.17)	2.8(0.08)	4.8(0.15)	5.2(0.13)
20.00	5.4(0.20)	2.9(0.09)	5.1(0.17)	5.4(0.16)
50.00	5.8(0.24)	3.1(0.11)	5.5(0.21)	5.8(0.19)

Station 92 (47.38N , 89.45W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.9(0.07)	2.7(0.05)	5.7(0.11)	5.8(0.10)
5.00	5.2(0.10)	2.9(0.07)	6.2(0.15)	6.2(0.13)
10.00	5.4(0.12)	3.1(0.09)	6.6(0.19)	6.6(0.16)
20.00	5.7(0.14)	3.3(0.11)	6.9(0.22)	6.8(0.19)
50.00	5.9(0.17)	3.5(0.13)	7.4(0.27)	7.3(0.23)

Station 93 (47.67N , 88.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	6.7(0.14)	3.7(0.10)	6.3(0.11)	7.0(0.11)
5.00	7.3(0.20)	4.1(0.14)	6.8(0.15)	7.5(0.16)
10.00	7.7(0.24)	4.4(0.17)	7.2(0.18)	7.8(0.19)
20.00	8.1(0.28)	4.8(0.20)	7.5(0.22)	8.2(0.23)
50.00	8.7(0.34)	5.2(0.24)	7.9(0.26)	8.7(0.27)

Station 94 (47.95N , 87.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.2(0.08)	4.8(0.09)	5.1(0.08)	5.6(0.07)
5.00	5.6(0.11)	5.2(0.12)	5.4(0.11)	5.9(0.10)
10.00	5.8(0.14)	5.4(0.15)	5.7(0.14)	6.2(0.13)
20.00	6.1(0.16)	5.7(0.18)	6.0(0.16)	6.4(0.15)
50.00	6.4(0.20)	6.1(0.22)	6.3(0.20)	6.7(0.18)

Station 95 (47.23N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	2	All
2.00	4.8(0.08)	5.9(0.08)	5.3(0.07)	6.0(0.07)
5.00	5.2(0.11)	6.3(0.11)	5.6(0.10)	6.3(0.10)
10.00	5.4(0.14)	6.5(0.13)	5.9(0.12)	6.6(0.12)
20.00	5.7(0.16)	6.8(0.15)	6.1(0.14)	6.8(0.14)
50.00	6.0(0.20)	7.1(0.19)	6.4(0.17)	7.1(0.17)